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THE ILLUSTRATED POULTRY RECORD

JANUARY 1913



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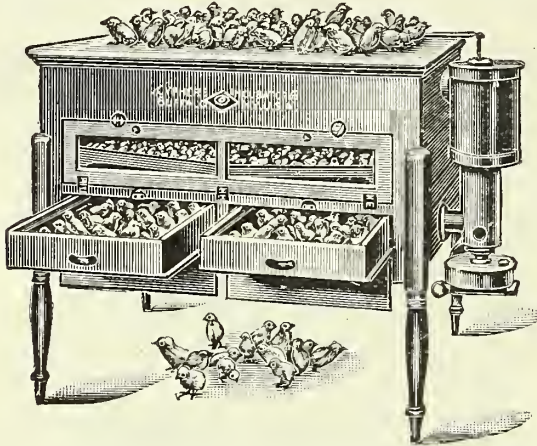
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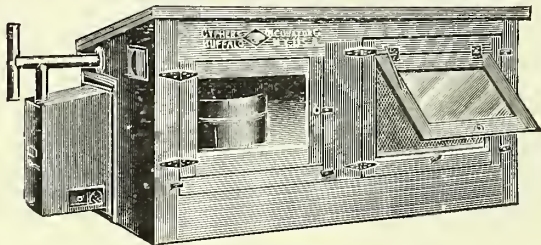
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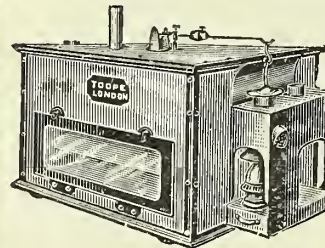
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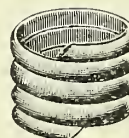
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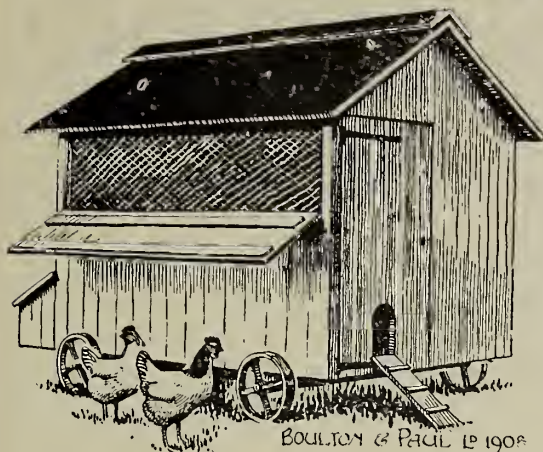


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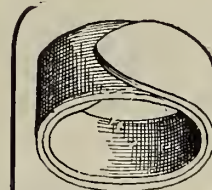
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ARTIFICIAL INCUBATION.—A10. English Incubator - House Interior.—A9. English Incubator-House, Exterior.—A12. Ventilation pipe for Incubator-House.—A14. Cypher Incubator.—60. American Incubator-House, Interior.—61. American Incubator-House, Exterior.—113 and 115. Mammoth Incubator.

NATURAL INCUBATION.—A13. Basket Nest.—A14. Double Nest, with Run.—A15. Double nest, with Run Unattached.—A16. Sitting Hen Feeding-Cages.—A17. Hatching-Shed.—A18. Hatching-Box.

TESTING EGGS.—A24. Testing by Lamp.—A19. By Hand with Candle.—A21. Exterior Appearance of Egg.—A20. Structure of Egg.—A22. Embryo 24 Hours.—A194. Exit Chicken and Embryo, 3, 5, 7, 9, 11, 15, 19 days (8 sides).—A23. Circulation of Blood.

NATURAL REARING.—A25. French House.—A26. Double Coop.—A151. Cheap Coop, 4½d.—234. Coop-hen with Chickens.

ARTIFICIAL REARING.—A27. Brooder-House Exterior (Theale).—A150. Brooder-House Interior (Theale).—A159. Brooder - House Interior (Theale).—Hearson Brooder, Exterior.—Hearson Brooder, Interior.—A28. Portable Pipe Brooder (2).—A 29. Portable Pipe Brooder Runs.—A156. Brooder-House Interior (Pipes).—A162. French Brooder-House.—193. Small Brooder-House (American).—192. Brooder-House, Runs.—A157. English Small Brooder-House.

HOUSING — A30. Ventilation Louvre Boards. — A31. Ventilation Gable.—A32. Lean-to House.—A152. Front New Scratching-Sheds.—A38. Scratching-Sheds, with Runs.—A41 American Scratching-Sheds, Front Elevation.—A39. American Scratching-Sheds, with Runs.—A34. American Scratching Sheds, Ground Plan.—A35. American Scratching-Sheds, Ground Plan, Portable Poultry-House.—A153. Portable-House with Run.—A40. Barrel Poultry-House.—A42. House with Self-raising Wheels (up).—A43. House with Self-raising Wheels (down).—A44. Fencing.—A45. Duck-House.—A46. Turkey-House.—A154. Danish Trap-Nest. — 3. Portable Poultry-House (apex).—35. Continuation Poultry-House (American).—40. Colony Houses (American).—93. Diagram of Scratching-Shed.—94. Diagram of Scratching-Shed.—110. Colony Houses and Trap-Nests.—171. Open-Fronted Poultry House.—182. Diagram of Back-yard House and Run.—293. Range of Breeding-Pens (. Zeal).—301. Birds Housed Amongst Bush Fruit.—317. German Scratching-Shed.—335 and 336. Portable Poultry-House.—297. Colony Houses (Piano Boxes).—322. Range of Laying Houses (American).—A158. Cockerel House.

FATTENING.—A47. Egyptian Fattening (2).—A48. Cramming by Pellets.—A49. Cramming by Mouth.—A163. Cramming by Funnel.—A64. Funnel for Fattening.—A65. Cramming by Machine.—A145. Interior Fattening-Shed.—A51. Outside Cages.—A52 Outside Cages.—A140. Interior Fattening-Shed.—A53. Killing.—A165. Plucking.—A147. Pens for Paeking.—A149. Sussex Fowls, Dead (2 birds).—A57. French Dead Poultry.—A66. Sussex Fowls, Dead (2 birds).—A58. French Dead Poultry.—A59. Ducks' Livers.—A61. Sussex Collector and Cage.—A62. Shaping-Board.—A63. Birds in Shaping-Board.—117. Pair Buff Orpingtons, Dead.

DUCKS.—A113. Aylesbury, Pair.—A143 and A143A. Aylesbury, Single.—A114. Rouen, Pair.—A115. Huttegum, Pair. A116. Pekin, Pair.—A117. Cayuga, Pair.—A109. Blue Swedish, Pair.—A118. Indian Runner, Pair.—A164. Young Ducks and Drakes.—266. Aylesbury Duck Group.—A160. Duck-Fattening Pen.—A161. Duck-House Range.—A172. Classification of Ducks.—A173. Colour of Flesh and Skin.

GEESE.—A119. Toulouse, Pair.—A120. Embden.—A121. White Chinese.—A122. Brown Chinese.—A123. Pomeranian.—A124 African.—A155. Arsamas.—311. Toulouse Geese, Pair.—A174 Classification and Characteristics.

TURKEYS.—A125. Black.—A126. White.—A127. American Bronze.—A128. Cambridge Bronze.—A129. Norfolk.—A130 Norfolk Turkeys (Dead).—50. Turkey Fattening-Shed.—51. American Bronze Turkeys.—118. Group of Dead Turkeys.—209. Mammoth Bronze Turkeys (Groups)—210. Turkeys in Field.—A175. Characteristics.

MARKETING EGGS.—A142. Rose Egg - Box.—A146. Grading Egg-Board.—B140. Reynolds' Egg-Box.—A141. Robinson Egg-Box.—A134. Testing and Paeking.

MISCELLANEOUS.—A131. Skeleton of Fowl.—A132. Ovaries. A133. Oviduct.—A135. Feather-Eating Parasite.—A136. Sealy-Leg Parasite.—A137. Gape Worm.—A 138. Fowl Mite.—A139. Fowl Lice.—119. Macdonald Plant.—167. Cornell Exhibit.—212. Cornell Buildings.—213. Cornell Exhibit.—116. Model Farm (Foreign).—385. Caponising (Eight Slides).

BREEDS

CLASSIFICATION.—A166. Laying or Non-sitting.—A167. Table.—A168. General Purpose.—A169. Breeds Laying Tinted-shelled Eggs.—A170. Colour of Flesh and Skin—White.—A171. Colour of Flesh—Yellow, Grey.—A68. Points of a Fowl.—A69. Lining a Fowl.—A83. Feather-marking.—A110. Gallus Bankiva.—A111. Combs of Fowls.—A112. Distribution of Domestic Fowl.

LAYING OR NON-SITTING CLASS.—A121. Aneonas, Pair — A94. Andalusian Cock.—A106. Brakel Cock.—A90. Campines, Pair A12. White-crested Duteh —A73. Black Hamburg, Pair.—A71. Silver Spangled Hamburg Cock.—A75. Houdans, Pair.—A92. White. Leghorns, English Pair.—10. White Leghorns, Danish, Pair.—47 White Leghorns, American Hen.—47A. White Leghorns, American Cock.—189. White Leghorns, American Pullet.—A102. Buff Leghorns, Pair.—188. Brown Leghorns, American Cockerel.—307. Brown Leghorn, English Pullet.—308. Brown Leghorn, English Cockerel.—309. Brown Leghorn, English Hen.—262. Black Leghorn Cockerel.—264. Black Leghorn Pullet.—263. Blue Leghorn Group.—A74. Black Minorca, Pair. — A91. Redcaps, Pair.—A96. Scotch Greys, Pair.

TABLE BREEDS.—A104 La Bresse Cock.—A105. La Bresse Hen.—A85. Crevecœur, Pair.—A80. White Dorking, Pair.—A81. Coloured Dorking, Pair.—A88. Silver Grey Dorking, Male.—A89. Silver Grey Dorking, Female.—146. Silver Grey Dorking, Cock.—150. Silver Grey Dorking, Pair.—Black Red Game.—A93. Old English Game.—A87. Indian (Cornish) Game, Pair.—A86. La Flèche, Pair.—A84. Malays.—A83. Red Sussex, Pair.—153. Red Sussex, Pair.—8. Speckled Sussex Hen.—231. Light Sussex Pen.

GENERAL PURPOSE CLASS.—183. Light Brahma American Group.—A98. Light Brahma Cock.—A101. Dark Brahma Cock.—A79. Faverolles, Pair.—A78. Black Langshans.—A99. Buff Orpingtons (Ludlow).—A100. Buff Orpingtons (Whippel)—A107. Buff Orpingtons (Ludlow).—71. White Orpingtons (Young).—Black Orpington Cocks.—67. Black Orpington Pair.—A77. Plymouth Rocks.—A184. Plymouth Rocks, American.—A103. Buff Plymouth Rock, Pair.—107. Buff Plymouth Rock Hen.—108. Buff Plymouth Rock, Male.—360. Buff Plymouth Rock Cockerel.—A108. White Plymouth Rock, Pair.—185. White Plymouth Rock, American.—A97. Rhode Island Red Pullet.—75. Single-Comb Rhode Island Red Cockerel.—76. Single - Comb Rhode Island Pullet.—361. Wyandotte Head, Typical.—A95. White Wyandottes, Pair.—186. White Wyandottes, American Pullet.—187. White Wyandottes, American Cockerel.—A72. Silver Wyandottes, Pair.—A75. Silver Pencilled Wyandottes, Pair.—A73. Silver Wyandottes.—A74. Golden Wyandottes, Pair.—95. Columbian Wyandottes (O. Hardee).—321. Columbian Wyandottes, American.—252 Nassau Cockerel.—255. Nassau Pullet.

APPLY TO

The Illustrated Poultry Record, TUDOR HOUSE, TUDOR STREET, E.C.

CONTENTS.

	PAGE
DIARY OF THE MONTH :	
One Thousand Nine Hundred and Twelve	145
One Thousand Nine Hundred and Thirteen. Poultry in Holland. Short Shrift for Foxes. Pseudo-Science	146
Sir Thomas Elliott, K.C.B. Contaminated Soil. Poultry Systems	147
The late Mr. W. B. Tegetmeier. Personal Letters—and after	148
LEADING ARTICLES :	
The Poultry Fancy in 1912. By W. Broomhead	149
Utility Poultry Keeping in 1912 By J. W. Hurst	151
Fighting Contagious Diseases in Holland By H. B. Beaufort	153
The Seven Stages in Poultry Industrialism By Edward Brown, F.L.S.	155
Personal Letters from an Old Fancier. x.—To a Poultry Co-operator	159
The Invisible Chicken. No. 111.—Some odd Features	162
CORNELL RATION FOR CHICK FEEDING	164
SOME REASONS FOR FAILURE By F. W. PARTON	165
THE POULTRY INDUSTRY IN BRAZIL By Leo L. Furness	166
PLUCKING GEESSE ALIVE	167
TEN YEARS OF A LECTURER'S LIFE—Part ii. By C. E. J. Walkey	168
THE RHODE ISLAND RED By George Scott	169
A DANISH POULTRY HOUSE By W. A. Kock	172
EXTRACTS FROM CONSULAR REPORTS	172
POULTRY ENTERPRISE IN CANADA By W. J. Brown	173
POULTRY COOKERY	174
POULTRY EXPERT LIBELLED, Broomhead v. Carl and others	175
BOOK REVIEW—THE SPORT OF PRINCES	176
A SCOTTISH POULTRY ESTABLISHMENT	178
CHICKEN REARING ON AN INTENSIVE SYSTEM	182
TABLE OF DECEMBER POULTRY, &c., Prices Quoted	186
CORRESPONDENCE	188

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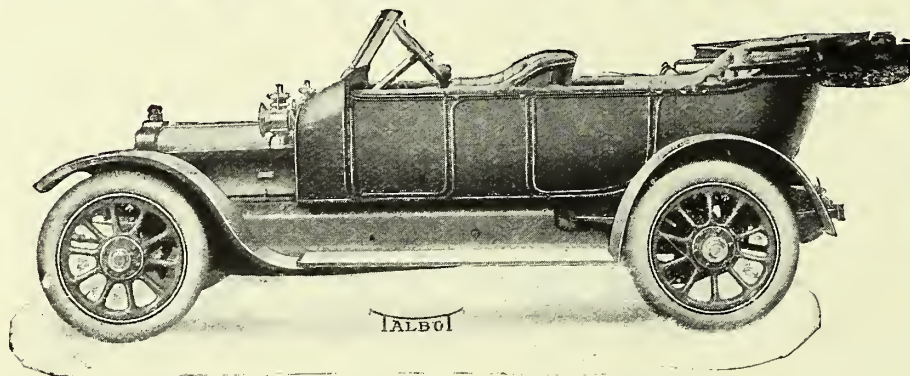
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INDEX TO ILLUSTRATIONS.

	PAGE		PAGE
A CELEBRATED RHODE ISLAND RED COCK		MAGNIFIED VIEW OF LEG OF EMBRYO	
<i>Frontispiece</i>		CHICKEN	164
A MODEL WINTER REARING GROUND AT		BREEDING PENS ON A SUCCESSFUL POULTRY	
UCKFIELD	148	FARM IN BRAZIL	167
A LESSON IN PLUCKING CHICKENS ...	151	FINE EXAMPLE OF A RHODE ISLAND RED	
PREPARING TO INOCULATE FOWLS ...	153	PULLET	169
PERFORMING THE OPERATION	154	A RHODE ISLAND RED COCKEREL ...	170
THE INSTRUMENT USED FOR INOCULATING		A RHODE ISLAND RED PULLET ...	171
THE FOWLS	155	A DANISH POULTRY HOUSE	172
THE EFFECTS OF KLEIN'S DISEASE ON A		THE "SPORT OF PRINCES"	176
FOWL'S ORGANS	156	PORTRAITS OF A RICH BIRCHEN DUCKWING	
AFTER THE INJECTION	159	COCK, DUCKWING HEN, & WHEATON HEN	177
AN EXCELLENT TYPE OF HALF-WAY HOUSE	161	MR. ROBERT MILLER	178
A MAGNIFIED PIN-HOLE VIEW OF HAIRS		A RANGE OF BREEDING PENS	179
AT TWELVE DAYS' GROWTH	163	A TYPICAL EXCHEQUER LEGHORN ...	179
MAGNIFIED PORTION OF HAIRS SHOWING		A LARGE INCUBATOR ROOM	180
PIGMENT GRANULES	163	THE "PARADISE" POULTRY HOUSE ...	18c
MAGNIFIED VIEW OF BEAK SHOWING TOOTH		JUST HATCHED. TRAYS CONTAINING 1200	
AT THE END	164	CHICKENS	181

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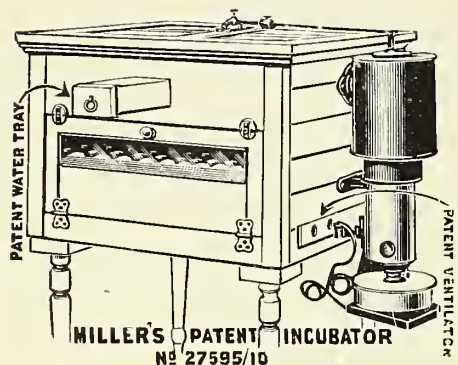
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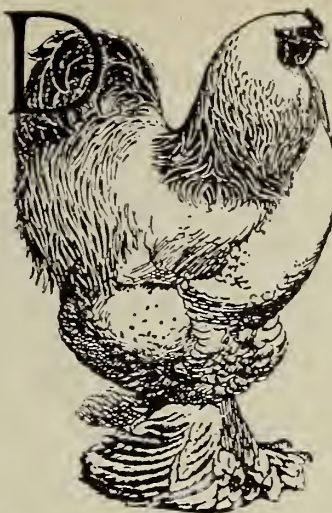
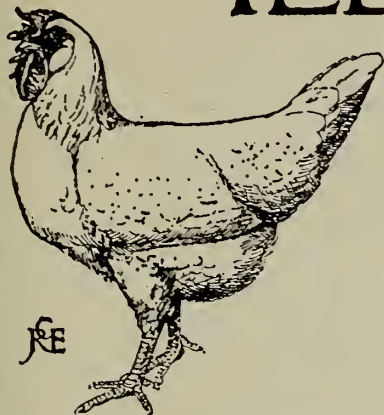


A CELEBRATED RHODE ISLAND RED COCK.

The above bird was awarded 1st Prize at the last Madison Square Garden Show at New York, as well as special prizes for both shape and colour.

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THE ILLUSTRATED POULTRY RECORD



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DIARY OF THE MONTH.

EDITORIAL NOTICES.

Telegrams : "VIVACIDAD, FLEET, LONDON."
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The Editor will be glad to consider any MSS., photographs, or sketches submitted to him, but they should be accompanied by stamped addressed envelopes for return if unsuitable. In case of loss or injury he cannot hold himself responsible for MSS., photographs or sketches, and publication in the ILLUSTRATED POULTRY RECORD can alone be taken as evidence of acceptance. The name and address of the owner should be placed on the back of all pictures and MSS. All rights of reproduction and translation are reserved.

The Editor would like to hear from readers on any Poultry Topics, and all Queries addressed to the paper will be answered by experts in the several departments. The desire is to help those who are in difficulty regarding the management of their poultry, and accordingly no charge for answering such queries is made.

The Annual subscription to the ILLUSTRATED POULTRY RECORD at home and abroad is 8s., including postage, except to Canada, in which case it is 7s. Cheques and P.O.O.'s should be made payable to the ILLUSTRATED POULTRY RECORD.

The ILLUSTRATED POULTRY RECORD is published on the first of every month. Should readers experience any difficulty in securing their copies promptly they are requested to communicate immediately with the Editor.

The latest date for receiving advertisements is the 20th of the month preceding date of issue.

The utmost care is exercised to exclude all advertisements of a doubtful character. If any reader has substantial grounds for complaint against an advertiser he is requested to communicate at once with the Editor.

One Thousand Nine Hundred and Twelve.

The period of time which will have been completed when this issue of the ILLUSTRATED POULTRY RECORD makes its appearance, has, in the main, been notable by the progress made by the poultry industry, and the year, so far as our own and many other countries are concerned, proved to be one of the most prosperous yet experienced. Difficulties there were, as will always be the case. Such are, however, stimulative when not in excess. Generally speaking, they were individual and local. In so far as the wider view is taken, it will be realised that almost everywhere those engaged in our industry, which advances more rapidly than any other branch of food production, have succeeded in their pursuit. Trade on all sides has been prosperous in the extreme, with the result that demand for breeding stock on the one hand, and for produce for consumption on the other, probably reached the highest point ever known.

Readers of the ILLUSTRATED POULTRY RECORD do not need to be reminded of the leading events of the past year, for these have been chronicled month by month. It is unnecessary to deal with these in detail. There are, however, two of these which call for special mention, first, the international meetings held in London last July, when the basis was laid for a world-wide association of those engaged in poultry teaching and investigation, which should not fail to influence profoundly the industry over the entire globe; and, second, the growth among exhibitors of more direct relationships, as expressed at the leading shows of England and America, and by the steps taken to secure, if that be possible, greater uniformity in standards.

The most serious feature of the year is the growing bitterness on the part of poultry-keepers against the various hunts. Unfortunately it would appear that things will have to be worse before they are better. For that, hunting men are alone responsible. For ourselves we can only say that the *I.P.R.* has still further strengthened its position as the leading organ of the poultry world. A largely-increased circulation has given us a wider field of influence and we shall continue to do all in our power to advance the best interests of the poultry industry.

One Thousand Nine Hundred and Thirteen.

The New Year opens with bright prospects in every branch, whether fancy or utility. So far as can be seen there are no immediate prospects of a check to national prosperity. Happily the dangers of a great European war appear to have passed. That would have been disastrous in the extreme, and no one could have foreseen the end. Given favourable seasons and the absence of foreign complications, there is no reason why the new year should not far exceed that just ended. The chief need is increased production, otherwise if prices continue to advance as they have in the past, demand and consumption will be checked. That is true in respect of fancy as well as utility stock. Extravagant prices are profitable alone to a very limited number. It is the greater volume of trade which counts.

In so far as the practical branch of the poultry industry is concerned, whilst not slackening efforts for extension of production by farmers, probably the question of intensification will demand and receive a large share of attention. On that side the wisest course will be to proceed slowly. There are dangers ahead, equally by enfeeblement of stock and outbreaks of disease. To that end the provision of extended facilities for education and investigation are essential.

Poultry in Holland.

The announcement that Mr. Edward Brown, F.L.S., is engaged on behalf of the National Poultry Organisation Society upon an enquiry into the poultry industry in Holland, in continuance of the valuable series of which four reports have already been published, will be received with interest. Mr. Brown has already made part of his observations, and states that there is much of importance and value to record. The growth of supplies of eggs from Holland, and the fine quality maintained, has led to this enquiry, the report of which will be awaited with considerable interest. A few years ago the imports into the Netherlands were greater than the exports. Now the reverse is the case,

In this connexion it may be mentioned that a great National and International Agricultural

Exhibition is to be held at Scheveningen, from September 3rd to 15th, 1913, in which breeds of poultry and appliances are to have an important place. Designs have been made for a great display of Dutch poultry, which will be in specially constructed yards, divided in accordance with the respective provinces. Special sections are open to foreign competition, namely, incubators and brooders, general appliances, egg testing and sorting machines, in which valuable prizes are offered, and we hope many British makers will compete. Programmes, in English, can be obtained from the Secretary, Royal Netherland Agricultural Society, 42, Binterhof, The Hague.

Short Shrift for Foxes.

Thanks to the action, or inaction, of certain hunts, poultry-keepers are dealing with foxes in a manner which is decided. Yet the supply of these animals is by no means exhausted, for aliens are brought in to afford the desired sport. There is, however, a limit even to the long purses of hunting men as to the supply of foxes. The end is, therefore, in sight, although those who ought to be most concerned in finding a solution, namely, fox hunters, are strangely supine. It is stated that some hunts are, as a consequence of killing foxes, refusing to pay any compensation at all, even where they have done so before. Such a step is as stupid as it is foolish. It can only aggravate the present position of affairs. Prevention is the first step, failing which the sole remedy is prompt and adequate payment for all birds killed by foxes.

Meanwhile, is it not time the Minister of Agriculture took some action in defence of the poultry industry? Recently a petition was presented to the House of Commons, signed by 300 Bedfordshire farmers, as follows: "Whereas poultry keepers suffer loss from the depredations of foxes and receive no adequate compensation, the undersigned urgently beg that your honourable House will without delay pass into law a measure for confining foxes within their coverts."

Pseudo-Science.

A correspondent of the *Illustrated London News*, makes an attempt to answer the question, "How many eggs does a hen lay"? in which, arguing from the Jungle hen, he says: "During fifteen years she would lay just under two hundred eggs. Man contrives to exhaust this supply during a single year. He can never do more; for he cannot create. Nature portions a definite, a measured quantity of germ plasm to her children, and allows a handsome margin for accidents, but when that supply is exhausted, no more is to be had." The same writer shows his knowledge of the subject by stating that Brahmas will lay more eggs annually than Leghorns.

It is time he went to the school of practical experience and observation. How many ova a Jungle hen has we do not know, nor yet whether a domesticated hen has more. What we do know, however, is that hundreds of thousands of hens will lay, if allowed to live long enough, 500 eggs at least. Upon this subject we hope to publish some valuable observations in our next issue.

Sir Thomas Elliott, K.C.B.

The announcement of Sir Thomas Elliott's retirement from the position of Secretary of the Board of Agriculture and Fisheries, and his acceptance of the Deputy Mastership and Controller of the Mint, has come as a surprise, although the two serious breakdowns in health during recent years will explain his desire to occupy a less onerous and arduous office than that at Whitehall Place. All will unite in wishing him many years of service in a post which, as an old Treasury official, he is so eminently qualified to fill.

This change marks the close of the first era in the history of the Board of Agriculture. Twenty years ago, when it was formed, the then Mr. T. H. Elliott was appointed Secretary. Then its operations were restricted. Gradually these have been enlarged. From time to time such important additions to its work as Animal Diseases, Fisheries, Small Holdings and Education have been made, each and all of which must have involved enormous labour upon its chief official. It is generally admitted that as an administrator Sir Thomas Elliott has attained one of the highest positions in the Civil Service. Those who have best known him have recognised his clarity of judgement and urbanity.

In the development of the poultry industry Sir Thomas Elliott has shown constant and deep sympathy. His was one of the first letters received by the Editor of the *Illustrated Poultry Record* on its establishment. He was for several years on the committee of the National Organisation Society. And it will be remembered that he opened the Second National Poultry Conference in 1907. At the time of writing we do not know who is to be his successor, but we can only ask for as warm a friend of our pursuit.

Contaminated Soil.

Gradually but none the less surely the dangers of tainted soil are being realised, though every generation has to learn the lesson for itself. Many instances could be cited, one of which, the latest, will suffice. Petaluma, in California, has been called somewhat boastfully "the Poultry Centre of the World," and it has unquestionably made marvellous developments in poultry-keeping on intensive lines. All appeared to go well up to a given point. Of late, however,

mortality in chicks and old birds has steadily increased, said to be in many cases twenty-five per cent. in the former and ten per cent. in the latter. In-breeding, artificial hatching and rearing, feeding, have all been suggested as the cause, and introduction of another breed than the white leghorn has been advocated, hitherto almost universal at Petaluma. These are, however, temporary palliatives not preventives. The cause is to be found that the land, in spite of cultivation, is gradually becoming charged with manure and "poultry sick." We support fully what is stated in a recent issue of *Farm Poultry*, namely, "intensive poultry culture on new land is like any other process in agriculture, that, having been used a short time, makes the land unfit for the crop which at first was most profitable upon it. The one sure remedy is rotation of crops under conditions which ensure proper treatment for the land." We cannot but think many of those going into poultry keeping at the present time and adopting large non-removable houses and runs, are making for themselves trouble and loss within four or five years.

Poultry Systems.

Our New Zealand exchanges record an action by Mr. F. A. E. Gordon against the *New Zealand Times*, in which he claimed £1,500 damages. Unfortunately the jury disagreed and thus the case may be retried, provided that the plaintiff determines to persist with his suit.

The facts are that Mr. Gordon sells a system by which he claims that the laying qualities of hens can be determined, for which he charges a couple of guineas, and evidently has found a good many purchasers. This, correspondents of the paper in question had characterised as a "fraud." In the evidence submitted it was stated that the author of this system had declared that a hen submitted to him for examination was capable of laying 240 eggs per annum, and that the same hen, presented later but unknown to him, was only a fair layer, and would produce about 150 eggs. Thus the plaintiff denied, but denial was to be expected. He did not, however, come out at all well in his examination.

Apart from this case it is surprising that people should be found willing to pay for secret systems, and if they fail to reap any advantage we cannot feel any sympathy for them. That does not absolve the vendors of these systems. So far as our observations have gone, it is money wasted. Knowledge is not to be obtained in this manner. Whatever is of real value is freely published in journals, books or bulletins, which have to stand the test of wide criticism and of which the real value is thus appreciated. Any-

thing secret is doubtful. We had thought of publishing the Gordon system *in extenso*, so that readers might know what it professes, but are debarred in that it is copyrighted.

The late Mr. W. B. Tegetmeier.

Full of years and of honours, Mr. Tegetmeier passed away in November, having reached the great age of 96. Thus there has gone from our midst the last of those men who did so much to shape the poultry industry as we see it to-day, and without whose pioneer work later developments would have been impossible. It is undoubtedly true that he was not in sympathy with the last-named, that his purview never

poultry, but his greater influence was seen in respect to poultry breeding. Critical by temperament he wielded a caustic pen. Those, however, who suffered therefrom, have always been first in expressing admiration for his great ability and extensive knowledge. With his death the Victorian period may be said to have closed.

Personal Letters—and After.

We publish this month the last of the series of letters which have been a feature of the ILLUSTRATED POULTRY RECORD since last March. These have awakened a great deal of interest. Our contributor, who hides his identity



A model winter rearing ground on the Farm of the Uckfield Agricultural College.

[Copyright.]

reached out to the greater ideals which are now general, and which have abundantly justified themselves. Such does not in any way militate against the valuable work he did, not alone in rendering assistance to the late Charles Darwin, but also in awakening attention to a long neglected branch of live stock. For these poultry breeders must be always grateful. His long connection with our contemporary *The Field* was honourable to himself as well as that journal.

Probably Mr. Tegetmeier would have disclaimed the statement, but a survey of his work leaves the impression that he was in thought and spirit essentially a fancier, although he was in strong antagonism to many of the extremes to which the exhibition system tends. In later years he gave a good deal of attention to table

under the pseudonym of "Enos Malpas," has dealt faithfully yet kindly with many questions, and pointed out much that requires change of ideal and method. There are other subjects upon which readers would gladly have heard his views, and we should willingly have afforded him an opportunity of expressing himself, but he declines our invitation for the present, with the promise that he may favour us again in the future when he feels a suitable time has arrived. With that we have reluctantly to be content. Again, in reply to many enquiries, it may be stated we are pledged to maintain the anonymity of the author.

In place of these letters we have pleasure in announcing that next month we shall begin a new series entitled "The Seven Stages of a Chicken," by Mr. W. H. G. Ewart.

THE POULTRY FANCY IN 1912.

BY W. W. BROOMHEAD.

THERE can be little doubt that, so far as the poultry fancy is concerned, the year which has just closed has not been an altogether satisfactory one. It will not be difficult to remember 1912. If only for its weather it will remain a memory with fanciers when other years have been forgotten. The summer was one of the worst experienced for some years, and the continual rains then, and in autumn too, resulted in the young birds not growing as they otherwise would have done. Fortunate those exhibitors who had taken advantage of the mild winter of 1911-12, and the congenial weather during early spring, and hatched out a few chickens, since those birds were those which had to be depended on to keep up their reputation at the first of the shows.

The financial aspect, however, cannot be said to have been a bad one; in fact, throughout the country trade has been generally good, there being plenty of money in circulation for likely winners. Admittedly there have not been any sensational sales at very high figures, but the number of moderate priced birds which have changed hands at the big shows must be something of a record, while, as far as one can gather, private deals have resulted most satisfactorily.

There has been no decrease, either, in the demand from foreign countries, and while the Orpington boom still continues there has been a good run on Campines. Fanciers in the United States have, as usual, been our best customers, although India, South Africa, Australia and South America have imported many exhibition specimens from the old country during the year that has just closed.

The number of shows appears to have been on the increase throughout the past year, and many small events—and among them those which have been “run” especially for the amateur element—have cropped up. These have been welcome in a way, since there cannot be any question that such exhibitions do much to encourage the small fancier to attempt greater things. The few classic shows of the year have been conspicuously successful, and more than one has created a record as regards entries, the best, of course, being the Grand International at the Crystal Palace—a remarkable display in all ways and a good sign that there is plenty of life in the fancy.

At the less important exhibitions, or at too large a percentage of them to say the least of it, the short entry cry has been the order of the day. In some instances this has been genuine enough as has been proved, while in others it has been “the usual old tag”—to prevent any

or much loss should the “gate” have been small. True enough, last summer was not blessed with outdoor weather, and many a committee had to “weigh out” for the shortage of the gate. Then again, it is not encouraging for struggling fanciers’ societies continually to run their shows at a loss, and one cannot be surprised at officials being anxious to ensure at least that the entry fees will cover the prize money.

As regards the numerous breeds and varieties much can be said; but in such a review as this the chronicler has to be brief. So be it. Following the order of the breeds as they appear in the catalogue of the greatest poultry show on earth, the modern Langshan takes pride of place. The breed appears to be nearer the modern Game fowl than ever, in fact, the taller the birds are, and the tighter their feathers, apparently so much the better. Blacks have done well, and a few have been in the Any Other Variety classes at the smaller shows, but there does not appear to have been a great rush for Blues. On the other hand, Croad Langshans have never been better, and wherever classes have been put on for the breed they have been supported in a very satisfactory manner. It is pleasing to note that a greater percentage of the Croads have shown true beetle-green sheen, a matter in which they were somewhat behind their modern namesakes. Dorkings, Cochins, and Brahmas, three of the old brigade, have shown up well at some of the classics, but seldom have new names been added to the list of their exhibitors.

Orpingtons continue to keep right in the front rank. The Black has certainly regained some of its former popularity during the past year, and it will be even more popular still when judges and fanciers alike take it right away from the Cochin feathering. Buffs continue to hold sway, and recruits are ever being added to the ranks of those who fancy it. It cannot be said that any advance has been made as regards uniformity of colour in the different strains, which is not surprising, since buff is not a definite colour of one shade. Whites have been numerous and good, but even yet it is by no means an easy matter to stage birds of this variety which can be described as “as white as driven snow”—sappiness and tinge prevail and cannot be washed out. The 1911 boom in Whites has apparently died down, but a remarkably good trade continues to be done in the variety. Jubilees have been very disappointing, since while there have been a few really good pullets, champion cockerels

could have been numbered on one hand, and omitting the thumb. The Spangled, too, has not been very startling, so unless something is done for these two varieties in the near future they will die out. On the other hand, the Blue has advanced to a remarkable degree, and better specimens of this fashionable colour have never been exhibited than those winning the prizes at the 1912 Club Show, the first and special pullet which gained the cup over all other varieties than the Buff—which did not compete—being an ideal specimen. Cuckoos have not been great, and the pity is that the standard for them is not revised to Barred. The Red:—the most that can be said of it is that it is still in the making.

Wyandottes have kept steadily on their way, and while there has not been a great number of the Laced varieties shown, the breed is without question still in the front rank. Whites have been on top as usual, and the dispersal of a well-known winning stud gave the variety a good boom. There have been some perfect Silvers and Golds exhibited, but the ranks of those fancying these two charming and difficult varieties have not increased to any great extent. Blacks have been rather better than usual, and an improved type, nearer the ideal Wyandottes, has been noticeable where competition has been keen. The Blue has come on well and colour is up to standard requirements. Buffs have come forward once more, and the pity is that the variety was ever allowed to go out of favour for newer breeds of this colour. Partridges continue to attract many, and the altered standard for the females, discussed at the close of last year, may give them another boom. The Silver Pencilled has not been much in demand,—at the Palace the class for cock or cockerel was represented by three birds only, and from one yard—and it will need much to get it popular. Columbians are about as they were, but the 1911 boom did not have very lasting results. One sees an odd Buff Laced, Blue Laced, White Laced Black and Spangled (black and white) occasionally, but seldom in dozens.

The Plymouth Rock is still fashionable in many quarters, and the great win by a Barred hen at the Palace—the best bird in the show in that collection of over 7,000 entries—had a good effect on that variety. Buff and Whites have also been prominent, while a few excellent Blacks have been shown, and one spies new varieties in Blues, Spangled and Partridge. Leghorns are as popular as ever, and going strong in the old varieties. Blacks have not been so numerous as usual but high quality has been well maintained. Duckwings have been exhibited well up to the mark, and so have

Piles, while there has been a decided advance in Blues, and particularly as regards their colour. Buffs have not been very strong, and the same may be said of Cuckoos. There has been a noticeable advance all round in Andalusians, and it is pleasing to note that interest in the old breed has been revived by the present boom in Blues. Minorcas are perhaps the most popular of the non-sitting breeds, and some perfect Blacks were shown last year.

A remarkably good advance has been made in Sussex, and all four varieties—for the Brown must be included—have shown that this old breed is worth cultivating. It has been pleasing to note the manner in which fanciers and judges alike have shown a preference for Speckled which have been absolutely distinct in shape of body from the Jubilee Orpington, and no longer has the cry been that the two are one and the same. In Reds colour has come nearer the ideal, and “peppering” has been conspicuous by its absence, while in Lights the body colour has been nearer a transparent white than the sappiness and brassy tinge of a year or so ago, and the neck-hackles have been more defined. In Browns, too, there has been more uniformity in the colour and markings of the females, while that of the males has been brighter and the hackles with better striping. Houdans, Malines, Bresse, and Faverolles have been nicely forward at the most important fixtures, and the advance in White Faverolles has been most marked. Hamburgs, Anconas, and Campines, too, have been exhibited in good numbers, and of high quality, and there is good ground for the present boom in Campines.

Rhode Island Reds continue to be very popular despite the great difficulty there has been in trying to fix the colour. The single-combed variety has advanced much in size, but there is room for improvement in this matter among the Rosecombs. Indian Game, Black Sumatra Game, Aseel, Malays, Modern Game, and Old English Game have been well up to the usual, and it is satisfactory to note that such old breeds can still make a show when they are catered for in an adequate manner. Yokohamas too, and Silkies, both truly fanciers' breeds, have been forward in fair numbers, while the “oddments” in the form of Polands, Spanish, Frizzles, Bakies or Dumpies, Scotch Greys, Crève Cœur and Redcaps have come out occasionally. The Bantam fancy is still a great one, while Waterfowl and Turkeys have their exhibitors in good numbers.

Truly, then, although the season as a whole was not the best there has been in the Fancy, it has demonstrated that the fancy element is still an important part of the great poultry industry of these Isles.

UTILITY POULTRY-KEEPING IN 1912.

BY J. W. HURST.

THAT the work of the past year has in many ways been progressive is an outstanding fact that cannot be gainsaid. It may very well be that the effect of the general tendency has not always been immediately apparent to the individual producer, yet the forward character of the tendency is undoubted and sufficiently obvious to those who make a comprehensive review of the record of events. In many particulars the influences at work for the promotion of utility poultry-keeping have as yet made little or no impression upon the minds and

benevolent and should result beneficially, always provided there is a sufficient leaven of the practical element. However, to leave the general for the particular—which more nearly concerns us at the moment—it may be doubted whether individuals will be equally disposed to describe the past year as progressive when they come to examine the financial results of practical operations.

Without too closely touching the market side of affairs, which will no doubt be dealt with elsewhere, it is perhaps permissible in this

**A LESSON IN PLUCKING CHICKENS.***[Copyright.]*

The practical side of poultry-keeping is kept well to the fore at the Uckfield Agriculture College. A class of students is here seen at work preparing chickens for the market.

methods of those who are engaged in practical production. But such influences, so far as their utilitarian possibilities may be gauged, must be taken into account and reckoned as progressive in the annals of the industry. In this connexion it must be allowed by all unprejudiced observers that 1912 was notable as providing proof in several directions of the efforts that are being put forth for the furtherance of the cause of useful production, both on the part of governmental departments and men of considerable scientific attainments and practical experience. The intention is at least

place to make some brief reference to the general course of events. At the time of writing it is impossible to tell the complete tale, but it is sufficient to point out that as regards imports there was a considerable decrease during the first nine months of the year both in the quantity of the eggs and the value of the poultry received from foreign sources of supply. There has, it is true, been some subsequent recovery as regards the volume of imports, nevertheless, the shortage very largely coincided with the difficulties with which home producers had to contend. At the beginning of the year

the English egg producer was heavily handicapped, and the shortage of the winter egg supply was considerable. This was, by many, attributed to the previous prolonged laying season, the effect of the drought upon the development of pullets, and the fact that an unusually large number of the older birds was killed off on account of the high price of feeding stuffs. The high prices of eggs that characterised the closing months of 1911, to which Mr. Rew drew special attention in "Agricultural Statistics" (Volume xlv, part iii.), continued into the new year. The mild weather at the beginning of spring increased supplies and lowered values, but there was some subsequent rise due to the influence of the dock strike. Following the summer fluctuations, the trend of events towards the close of 1912, including the influence of the war, is fresh in the minds of producers—high prices being generally maintained.

Relative to the high price of food it will be recollected that it was shown in the November issue of the *Illustrated Poultry Record*, that the advance in egg prices has been greater than that of the food consumed. This fact should be evident carefully considered, but although it has been stated that there has also been some corresponding increase in chicken prices, it is evident that this applies rather to the finished product in the market than to the unfattened chicken sold to the higgler. However this may be, and it is almost impossible to obtain sufficiently reliable information at the moment, it is certainly true that some old rearers of table chickens who have discontinued production during the past year have given the high cost of food as the reason. It is contended that there should be more sympathy between the higgler's price and the market value for the finished product. On the other hand, there have been many who have taken a wider outlook, and there has been a very encouraging increase in the number of those who regard egg and poultry production as a sound commercial proposition. Taking our stand upon a comprehensive basis, it is possible to regard the future of the industry with some amount of optimism. Methods need revision and producers need combination; but with continued research and experiment, and the spread of an organised co-operation, there is no reason to doubt a satisfactory future for utility poultry keepers.

Among the more important events of the year may be mentioned the publication, in January, of Mr. Edward Brown's "Report on the Poultry Industry in Germany," which threw a flood of light on the question of supplies and the almost inevitable future dependence of this

country upon the home production of eggs and poultry. (A further inquiry into the conditions in the Netherlands is now in progress.) In the same month the British Poultry Federation took the important step of opening a London depot for the handling of the produce collected at the several centres. Following the announcement that the Development Commissioners had recommended a substantial grant for the establishment and upkeep of a National Poultry Institute, an appeal was issued in February by the provisional committee to enable compliance with the specified conditions. In March a Poultry Superintendent for Scotland was appointed, and the newly-formed Scottish Board of Agriculture have also shown their interest in the industry by the promulgation of a scheme for the establishment of poultry breeding stations throughout the country. In May came the announcement of the grant of £500, from the Development Fund to the U.P.C., for the holding of a twelve months' laying competition. In June the Census of Production was published, which, although belated and incomplete, served to show the very unnecessary limitations of the output from the farms of Great Britain. Owing to the absence of sufficient data, it was impossible to make comparisons with recent years, but the Irish annual returns showed an increase in that country in the numbers of all descriptions of poultry except ducks. In July, the Table Poultry Club was formed as a separate body, rather than in conjunction with the U.P.C. as had been proposed. The same month was especially notable as that within which was held the inaugural meeting of the International Association of Poultry Instructors and Investigators. The real significance and importance of this concrete manifestation of a great world movement was very inadequately recognised by the majority of poultry keepers at the time, but it is becoming increasingly evident that great benefit can scarcely fail to result to the several countries concerned from the comparative studies of those engaged in the promotion of the industry and the investigations proper to the work.

The twelve months' laying competition at the Harper-Adams College commenced in October, and the publication of the report of the U.P.C. Committee of Inspection resulted in some discussion regarding the suitability of the conditions and arrangements.

Utilitarians lost two good friends in 1912 by the death of Mr. P. Percival in February, and Mr. W. B. Tegetmeier in November; the former was one of the oldest members of the U.P.C., and the pen of the latter was at the service of the industry for half-a-century.

FIGHTING CONTAGIOUS POULTRY DISEASES IN THE NETHERLANDS.

By H. B. BEAUFORT.

(Aerdenhout, Haarlem, Holland.)

PRACTICAL breeders will tell you that prevention of diseases is not only better than cure, but also much easier. When a fowl is really ill it is a proof that it possesses insufficient staying power to sustain the attack of the disease-causing elements. We are infected without getting ill, and it is the same thing with our fowls. A hardened, well-fed body is the best prevention from attacks of disease. Practical breeders however, know quite well that the best means of keeping their fowls healthy is good treatment and housing, and the elimination of all weak and badly-developed fowls. Our farmers, however, are of a different opinion. Year after year they keep more fowls, but the manner of feeding and treating improves but slowly. Housing especially requires improving, for unsuitable houses are one of the main causes of the outbreaks of fowl diseases.

Good treatment and housing, however, are not sufficient to prevent disease. This was apparent in Limburg in 1901, where fowl cholera, imported from abroad, broke out over a large area of country. A large number of fowls was totally destroyed, and the disease appeared on farms as well as in the fanciers' yards. The circumstances under which fowls are kept on a farm are most favourable for the spreading of disease, and this is especially the case when they are allowed to run free. Fowl cholera brought over by the imported fowls is always threatening, especially in the southern provinces. This is one of the reasons why it has become understood in the Netherlands that, however necessary it is to set our farmers a good example, and to show them the great advantage of good treatment and housing of their poultry stock, it is not sufficient by itself.

When an epidemic breaks out, powerful support should be offered. From this point of view the

Government should assist as much as possible, especially with a view to prevent rapid spreading. It is no longer a matter of personal interest, but one of importance to all poultry-keepers. The same principle applies to the prevention of any plague. The chief remedies for this are serums and vaccine, which are disposed of gratis by the Dutch Government through the State Serum Institute at



PREPARING TO INOCULATE THE BIRDS.

[Copyright.]

Dr. Heunepe is seen in a white coat, while Mr. Beaufort, the leading authority on utility poultry in Holland, is on the extreme right of the picture.

Rotterdam. To be able to prevent a disease, one must know its true nature, and, therefore, any poultry-keeper has a right to send his sick or dead fowls to the Institute for research purposes. Having done this, he will receive information of the nature of the disease and the means of prevention. All this is done gratuitously. As notes on research are regularly being made, we shall eventually acquire a pretty complete knowledge of the contagious diseases in our country.

But here a further difficulty comes in. It is not easy to persuade farmers to send their fowls to the Institute, whenever necessary. Although the research is gratis, the farmers believe strongly that

nothing can be done for a hen suffering from cholera, and that the disease has to disappear by itself. Sometimes ravages, made by this disease, last until the last hen has been killed. Powerful support in this matter is being given by the well-known Association, the V.P.N., with its 20,000 members.

The diseases which are the cause of most danger to us, as they spread so rapidly, are fowl cholera and the disease discovered by Dr. Klein in London, called "Klein's Disease." For both diseases a serum is disposed of gratis by the Institute, and the results obtained are marvellous. Cholera was discovered

as a good idea had been obtained as to how prevent this disease, measures were taken to stamp it out entirely. The serum was only given to veterinary surgeons, and this caused difficulty as they must, of course, be paid for their work. Therefore, after taking counsel with the director of the Institute, one of its veterinary surgeons was made available for the inoculation to be carried out on a large scale. So at Amersfoort and its surroundings 10,000 fowls were inoculated in one week. All these fowls were not necessarily ill. There were only 200 sick fowls, as a matter of fact, to which a serum was applied. To the remainder vaccine, a so-called preventive



PERFORMING THE OPERATION.

The poultry keepers of the district bring their birds to a central place to be operated upon.

[Copyright.]

in our country in 1901, and was caused by the import of Italian fowls. Among these fowls, weakened and exhausted on their journey, contagious diseases broke out quite easily. In those days fowls were sold to the farmers at very low prices, and the result was that in the province of Limburg the greater part of the poultry stock was destroyed. Cholera has appeared occasionally since, but only sporadically. If the serum is applied to the sick fowls, about 95 per cent. recover.

Klein's disease has not made such rapid progress, though it is just as virulent. The incubation period lasts for about ten days. This disease has occurred in various parts of our country. As soon

inoculation was given. The serum, which is prepared from horses, is applied to sick fowls, and cures them. The serum is of no value to healthy fowls. For them to be protected against disease, vaccine must be used. This is a culture of *cacillus gallinarum*; and by its means the fowls remain immune from the disease for a year.

This preventive injection is of great value in protecting them from disease. That in one week 10,000 fowls can be treated is due to the fact that the farmers were all members of the association. This association regulated everything, so that the farmers were informed beforehand on what days to keep their fowls in their runs.

THE SEVEN STAGES OF POULTRY INDUSTRIALISM.

By EDWARD BROWN, F.L.S.



VERY individual, every community, every nation, every pursuit, every industry, and every trend of thought and action, has to pass through various evolutionary stages. We do not expect men to be born fully grown, physically and mentally equipped. Nor can any branch of our national life, such as poultry-keeping, step from adolescence to complete maturity, without passing through the evolutionary process, which, however, may be prolonged beyond what is thought to be desirable. That cannot be avoided. Growth takes time. Attempts to force unduly the pace beyond our

a considerable way from reaching the summit of maturity.

1. OBSERVATION.

The earliest consciousness of an infant, apart from its physical needs, is when its wondering eyes are opened to the world around, realising that there are differences between the objects upon which it looks. That is the beginning of the observatory period, without which can be no real growth, even in animal development. So is it with all pursuits. There must be a season when absorption of impressions is the main object.



The Instrument used for Inoculating the Fowls. (See page 153).

[Copyright.]

knowledge and experience will certainly end in disaster. In some cases progression is more rapid than in others, due to favourable circumstances, or to special adaptability or ability on the part of those concerned in the work, or to the impelling influence of needs and competition. The process, however, is the same. It is merely a shortening of each step.

It will be of interest, therefore, at the beginning of a New Year, to study the stages or ages of the poultry industry, and to discern, as far as possible, what are the developments which have taken place, so that we may know what remains to be accomplished. We are yet

Such was the case with the poultry industry, in which the period of infancy was very prolonged, extending over many centuries. In some of the less civilised countries this stage has not been passed; in others the advance has been very recent. As we endeavour to pierce the gloom in which, for us, the remote ages are enveloped, it is to find that progression was due to observation, in its turn impelled by personal needs for food. Man lived by destruction of those forms of life, vegetable and animal, so abundantly provided by a beneficent nature. In that was no constructive effort so far as his influence upon reproduction was concerned.

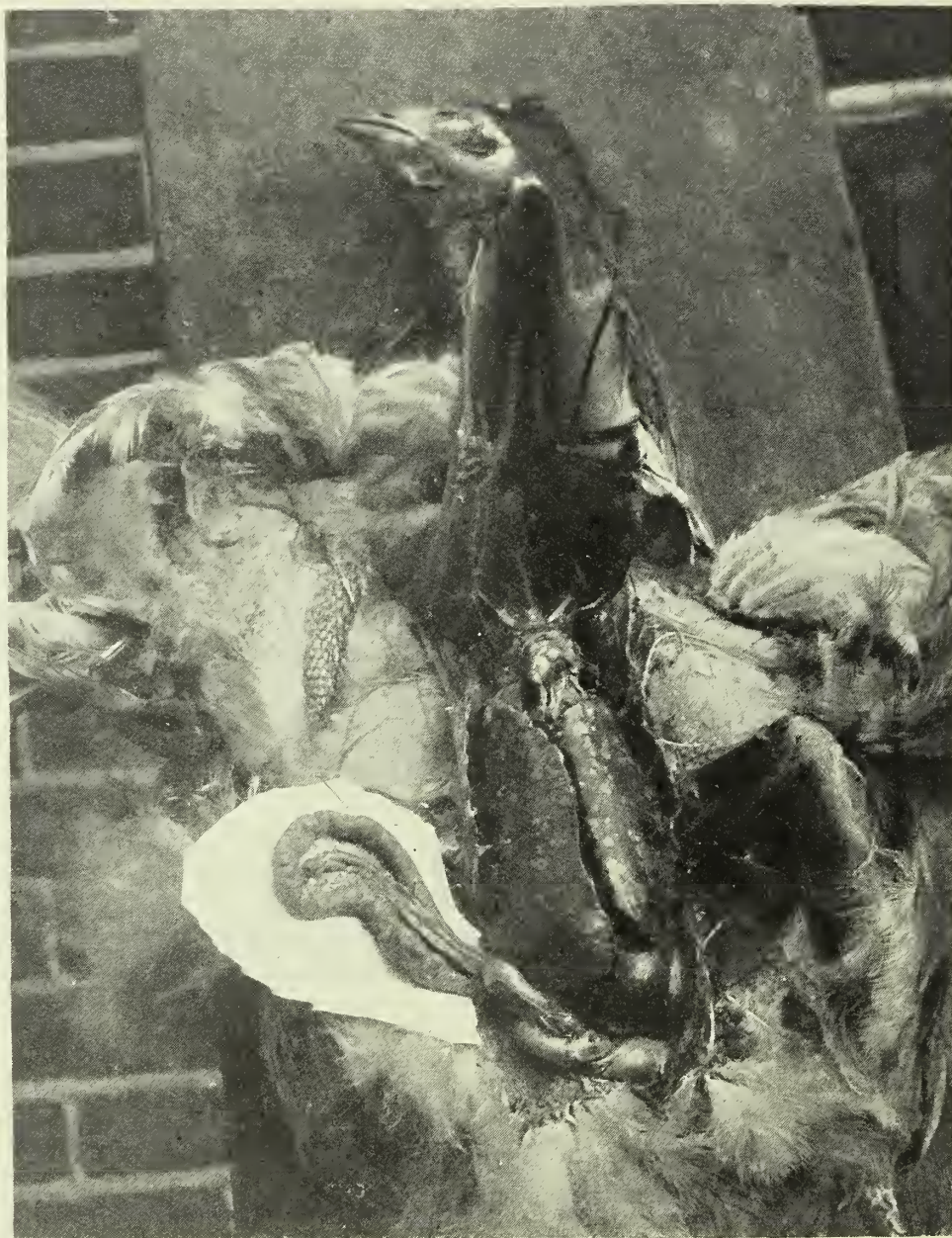
When and where observation led to action, by whom and how came the first dawns of domestication, in what country and by which peoples the fowl was brought into the service of man, we have no positive knowledge. All is lost in the mists of antiquity. Probably the man and the fowl were equally contributory to this result. Much that is now obscure would be revealed were that information ours. What we do know is that for some hundreds of years throughout the civilised world, men were gradually realising that poultry were amenable to their control, and could be made to occupy an important place in supply of food, as that the business of breeding fowls either for the sake of their eggs or flesh, was possible upon profitable and, therefore, industrial lines. It is sometimes amusing, in the light of longer experience, to read the works of earlier writers upon poultry, though they were frequently very wise, but we must remember that the pursuit was in the infantile stage, and that at such period judgments are restricted, as is the outlook. Much was due to the efforts of primitive races, such as Asiatics in respect to the fowl, and Mexicans with regard to the turkey.

2. IDEALISATION.

When once the child has passed the primary stage, play is given to its fancies. The commonest objects have woven around them ideals that are often very beautiful and wonderful. An old rag doll or toy of no value are centres of a world which speak to the child in a language all their own. The imagination makes them very real, and the effect is profound. Dwarfed indeed is the nature that has been denied this opportunity, which is necessary to evolution of

manhood or womanhood, as well as giving an immediate interest and delight that are great.

So has it been with poultry keeping. Among the ancient writers many traces of this spirit can be found. Legends and traditions gathered around domestic poultry, leading to a measure of idealisation which was essential to progress.



The effects of Klein's Disease on a Fowl's Organs.

[Copyright.]

In this direction the material is less evident. Man began to realise that his power of influence was not restricted by that which was immediate, that he could modify and change more or less in accordance with his ideals, though that knowledge probably came slowly and at a later stage.

Centuries ago the cock-fighter asked why certain birds were better than others, often, however, adopting erroneous views and making assumptions that could never be proved, and which failed in practice. Competition in the cockpit and its successor, the show room, followed the attempts to secure by selection, fowls better than known before, and superior to those owned by others. That this is a very important period in the development of the poultry industry in any country is unquestionable, and that without such idealisation as expressed in breeding for and origination of higher types, evolution would be checked is equally true. My firm belief is that without this stage of growth there would be an arrest of development, and I look upon exhibitions as having contributed throughout this and other countries in a necessary and most valuable manner. At the same time it can alone be regarded as the stage of childhood, with all the limitations inseparable therefrom, yet with those charms which ever gather about us when our ideals are in process of formation, ere the material side of nature has taken full possession, and before the eye has lost its wondering perspective, or the mind discerned that things are not always what they seem. Unfortunately the sense of mere utility means a loss of many finer perceptions, in which respect the fancier as such can claim a decided advantage over the ordinary practical poultry-keeper.

3. ANTICIPATION.

One of the first things which strikes us when children enter the third period of life, usually at the time they are at school, is that the future is being anticipated. The boy begins to talk about what he will do when a man, the girl looks forward to the time when she shall be mistress of her own destiny. In respect to the poultry industry this stage shows considerable variation and duration. At one time such anticipations were very circumscribed, merely those which included the keeping of a few fowls on a farm or by the roadside. With, however, the birth of greater ideas, the growth of needs and enhancement of desires, the widening of outlook has been most apparent. As the education of every generation is broadened, so we can trace that anticipations are gradually enlarged.

Did space permit, many instances could be cited in proof of what is here stated. One will suffice. In 1749, de Reamur published his work on artificial incubation, in which we can see how that famous scientist was looking forward to a time when this method of hatching would be an accomplished fact. It was not, however, until more than 125 years later that in Western Europe incubators were a practical

success. Probably had it not been for de Reamur, or someone like him, that result would have been even longer delayed. What is true in this branch of the industry is seen throughout, and the process is still going on. Every new idea or development has to pass through a similar embryonical stage. Anticipation is necessary to advancement. We must see things that are not yet.

What I desire to urge in this connexion is that the anticipatory period is essential, and that there is much remaining to be done in view of the times that are yet before us. The wonderful progress which has marked recent years is largely due to the reaching out for newer methods, for greater developments. Within the last ten years the poultry industry has advanced to a greater extent than any other branch of agriculture.

4. EXPERIMENTATION.

Idealisation and anticipation are, however, at best, but theoretical. Unless these are tested by stern practice they are of very limited value. To stop at this point would mean an arrestment of development, just as if the schoolboy did not grow either mentally or physically after he was, say, fifteen years old. Ordinarily at the period named he begins to test by practical experience what he has previously been learning, in the course of which he has both to unlearn and to learn further. Each succeeding generation must do this for itself. Our industry was not and is not exempt from that stage. Multitudes of schemes have been devised, of methods have been suggested, of appliances been planned, which were admirable in theory, but failed in practice, and the process is going on to-day, on a larger scale than ever before. Too often, had the knowledge been greater, much costly experimental work might have been avoided.

One of the most valuable results which should follow the establishment of the International Association of Poultry Instructors and Investigators will be in making more widely known the experimental work conducted throughout the entire world and in extending that work. At the same time it is important to recognise that it is highly educative, and as a demonstration must be constantly repeated for the sake of those who are coming forward as learners. On the other hand it is of interest to note that the experimental stage is inseparable from advance to positive knowledge, and that, although the industry as a whole has passed through it, as evidenced by the fact that we have ample proof of the profitableness of poultry-keeping, it is required to a greater extent than ever in respect to new methods as these are introduced.

5. EXTENSIFICATION.

The stages already referred to are but leading to application on a commercial basis. Infancy, childhood, boyhood, and apprenticeship, are preparatory to the life's work, when the individual contributes to the great volume of production, in which the winning of rewards is involved. To accomplish that purpose, operations must be on a sufficient and adequate scale. In the earlier days, whilst there were some who had vast ideas, and who ventured and lost all, their knowledge and experience were in inverse ratio to their ambitions. Mad schemes were heralded forth thirty to forty years ago, just as they have been of late. We are, however, coming to a saner condition of things, and have learnt something at least of what we cannot as well as what we can do. We are realising the limitations of our industry, the need for maintaining a balance between animal and plant life, and that the line of extension, at least for food production, is in association with general agriculture, supplemented by contributory production upon breeding farms. It is in this direction that we must look for extensification of production all over the globe. Generally speaking, it is here and in the next stage that the poultry industry is working at this moment. We are now on *terra firma*, and our business is to go forward with "more poultry and better poultry" as our motto.

How far what is known as intensive poultry-keeping will ultimately succeed remains to be seen. Should it prove commercially possible a vast field will be opened. At present it is in the experimental stage. Whether it will ever emerge cannot be stated. We may watch with keen and sympathetic interest, as I personally do, those who are pioneering in this way. One thing is evident, namely, that up to now the theories advanced have not been proved. The ultimate issue will be determined by whether the poultry-keeper adopting such methods can make the business continuously profitable. We are not at that point by a long way, and I fear ere it is reached much money will be lost.

At this moment advance is dependent rather upon extensive than intensive methods.

6. ORGANISATION.

With extensification is involved the need for organisation in respect to our industry, more especially in placing products in the hands of consumers. A little, very little, has been done in that direction, not much more than gaining a knowledge of what is required, and how such organisation may be applied to the varied conditions met with throughout the country. With increase of the poultry industry the need

for efficient organisation will grow rapidly. Speaking generally, that side has hardly been touched, and the next stage to be entered upon must be what is here stated. As men advance in years, as they produce beyond their own immediate requirements, and as they desire to supply the needs for more or less distant purchasers, efficient organisation becomes essential to success. The great movement which is taking place in almost every country is in response to conditions unknown before. Organisation is essential in production and securing of supplies at the minimum of cost, in breeding, in hatching, and in finding, profitable outlets for the finished product whatever that may be. What we have to do is by education and example so to organise the industry that every one entering upon it shall have a fair chance. Such has only too often been denied in the past.

How great is the need for organisation few can realise unless they have had an opportunity of studying the question closely. By carelessness, by bad methods, by failure to understand what consumers require, and, in not a few cases, by deliberate deception, the amount of money annually sacrificed is enormous. Until the responsibility is brought home to each individual producer this unfortunate condition of affairs will continue. Hence the need for organisation.

7. REALISATION.

Individuals may have realised their ambitions and desires to some extent, they may be adding substantially to their incomes or even making a good living by poultry-keeping. Communally and nationally, however, we are far from the attainment of the object we have in view. So long as opportunities are not fully taken advantage of, or the country as a whole fails to produce as much as it might, we have failed in the attainment of our purpose. The danger of success is that there is often a slackening of effort. When a man has succeeded in his ambitions he begins to take things more easily, to become slack, to be less careful. Whatever, therefore, may be the case with a few who have engaged in the poultry industry, so far as the greater number are concerned, as of the nation as a whole, the stage of realisation is as yet far distant, if ever it can be fully attained. It is to that end our efforts must continue to be bent. That great will be the rewards, vast the results, I do not doubt. In any case, the labour will be well rewarded, for in the striving to accomplish our ideals much will be learnt that is as yet unrevealed, and there will be the satisfaction of helping those engaged in the pursuit to greater success, and providing our great populations with important articles of food.

PERSONAL LETTERS FROM AN OLD FANCIER.*

X.—TO A POULTRY CO-OPERATOR.

MY dear Mr. Cooper.—I was very interested to read your letter and to hear that you are starting an egg and poultry depôt in your district, for which I hope a successful career. That there is abundant work for it to do is evident, both from what you have told me and what I saw on my last visit to you. In this thickly populated country are many districts where the opportunities are few because the local demand so far exceeds the supply. Such does not appear to be true with you.

In these days we are all co-operators. Formerly

ism. I have known people who would sooner be dubbed Little Englanders than touch co-operation with a walking stick. That, however, is all changed. It is amusing to read the speeches of some people who advocate it, because they have never realised what it means and do not understand co-operation. If they did, another tune would be sung. True co-operation is the purest form of democracy I know. There are many advocates of the one who dread the other as the devil is said to hate holy water.



AFTER THE INJECTION.

The operation of inoculating fowls (described fully on pages 153 and 154) is an extremely simple one, while the fowls themselves are apparently unaffected.

[Copyright.]

the term was almost opprobrious. Those who adopted the name were classed with radicals, dissenters, fenians, and even socialists, if not quite as low down as anarchists. The advent of co-operation was feared almost as much as red republican-

We are in danger of too much spoon-feeding just now. If this tendency is carried too far, by doing everything for everybody, disuse of initiative and self reliance will lead to their destruction. Leadership there must be, but it should inspire to increase of action, not do for people what they can do for themselves. Dependence is often prosperous. Some time ago I was in a village which shall be nameless, living under the benevolent if despotic rule of a great landowner. Everyone had a living wage, and more. They had comfortable houses and gardens, were well dressed, and not over-worked. As animals they had little to ask for, but

* The previous letters have been :—

- No. I. —“To a Young Judge,” March, 1912.
- No. II. —“To a Show Secretary,” April, 1912.
- No. III. —“To a Lady Poultry Farmer,” May, 1912.
- No. IV. —“To a Disappointed Exhibitor,” June, 1912.
- No. V. —“To a Country Poultry Instructor,” July, 1912.
- No. VI. —“To a Specialist Poultry Breeder,” September, 1912.
- No. VII. —“To a Poultry-phobe Agriculturalist,” October, 1912.
- No. VIII. —“To a Show Reporter,” November, 1912.
- No. IX. —“To a Master of Foxhounds,” December, 1912.

as men and women they were poor creatures, denied the right to think and act for themselves, merely automata. That is not the way to make a strong people. Under such conditions combination is not co-operation. The last named involves the mental as well as the material contributions of everyone concerned. All should be free to say what they think. Co-operation will fail if it has to be subsidised by and be dependent upon the squire and the parson. That is bastardy not legitimacy.

You are out, my friend, for many disappointments. There is nothing more disheartening in human experience than attempting to rouse the inert. It has, however, to be done, and some one must attempt the task. One might expect that all in a district would be keen to unite together for mutual benefit, the advantages of which are so evident. That is not, however, the case. The meanness of human nature is very great everywhere, perhaps most of all in rural districts, even among those whose gains would be greatest from combination. They want others to do the hard work, to bear the responsibility, and intend to come in and reap the benefits when success has been achieved. Some who could help you greatly, and whose support would make the result almost certain, will hang back. If you fail they will chuckle to think themselves so wise and clever. You must expect all this. If ever you are discouraged read the story of what Sir Horace Plunkett and his fellow workers had to meet in the early days across the Irish Sea. If that does not inspire you nothing will. Remember that a nightingale sings just as sweetly whether to itself or a hundred listeners.

Co-operation in these days is a word to conjure with, but the system has many weaknesses. Not that in principle it is wrong, but by reason of the way in which it is applied. Co-operators are their own worst enemy. The lack of ordinary business instincts shown by many of them, and in a great number of societies, would be amusing if it were not so serious. Have you ever heard of the female Languedocian Scorpions who kill and eat their husbands as soon as their marriage is consummated? Frequently co-operators are even worse than that, for they kill the goose that lays the golden egg before the fruit is realised. Were it not that co-operators have a restricted trade and to some extent possess non-competitive markets, it is not too much to say nine-tenths of the societies would, on present lines, go off in a galloping consumption. If traders were as negligent, as untidy, as slack, they would be in the bankruptcy court very speedily. A French cynic has said that we have a certain pleasure in the misfortunes of our best friends, and you may imagine how traders smile at the infantile and amateurish efforts of not a few co-operators.

As I have already suggested the fault is not in the principle, which is perfect, but in its application. Too often failure has resulted from disloyalty on the part of those concerned. They have blamed

everyone except themselves. Many people like other folks to carry their burden. It is told of a good lady who arrived at a country station just as the train she intended to travel by moved out. There was not another for some hours, and she stood fuming and furious because it was "on time," as the Yankees say. Just then a man rushed up, also too late, and as he gazed at the rear of the departing vehicles he shook his fist at it and said "Damn that train," when the lady ejaculated "Thank you, sir, thank you." She was glad to have some one even swear for her. What both should have done was to kick or curse themselves, as they were at fault, not the railway service. Remember that failure in almost every case is the fault of the failees, not their circumstances or competitors. It is a hard lesson of life, but a just one, that we despise the failures and unduly praise those who succeed. Spoon-feeding tends to degeneracy, which is but another term for failure. One old writer has said "we can only deserve not command success." Rewards follow accomplishment not effort.

One of the great faults of co-operators may be described as "too-late-ness." A country man is said to have found a nest of eggs. Taking up one he cracked and broke it into his mouth. As the contents were swallowed a chirp was heard—it was an almost hatched chick—when he said, "Ah, my friend, ye're too late in speaking." A society reported recently that it had contracted for a supply of turkeys with traders, and issued a notice to members that these must be delivered for grading, packing and dispatch by a given day. The bulk arrived one or two days late, with failure to catch the best market and a heavy loss as a result. I was talking recently to a trader who does a large business in eggs and poultry, and has been eager to help home producers. He stated that for bad methods and unreliability co-operators gave him tenfold more trouble than all other suppliers combined, although the amount of their trade was less than one-tenth in volume. He put it tersely thus: "If I conducted my business on the same lines it and I would go to the devil in six months."

Pray remember that "actions speak louder than words." We may talk too much about co-operation. Some is necessary, but unless words are resolved into action, and action ends in permanent results, all will be vain. Some one has said: "Your deeds speak so loudly I cannot hear what you say." That is what should be aimed at. The Danes have let other people do the talking; they have done the work.

Thomas Carlyle said that "good management is the mother of good luck." What you have to learn in the first place is the conduct of your business on business lines, in which respect you must copy the most successful commercial enterprises. No matter whether you sell a dozen or a million eggs, a score or a thousand birds, the imperative necessity is that the trade shall be systematised, and that those with whom you are trading shall be able to depend upon

your word and act. I am well aware that there is much chicanery in trading. If we could purify our commercial life it would be revolutionised. Only recently a buyer for a large firm told me that he has often made twice his salary by commissions from houses with which orders were placed. Acts of Parliament have failed to stop such dishonest

and that is seldom too costly. Bad or inefficient managers can never be cheap. Some of the best labour I have known was voluntary, and some of the worst.

You have heard it before, but let me remind you that the hardest task before you is to get those who may co-operate with you to realise that quality



An excellent type of "half-way" house.

[Copyright.]

This form is very useful indeed for housing chickens after they have left the brooder, and before they are quite large enough for a full-sized house.

practices. Unfortunately certain forms of co-operation are equally bad. In fact, it is said that these are more corrupt than is ordinary trading. Keep your hands clean. Only thus can your self-respect be maintained, and your integrity assured. What I should like to see would be that any official or committeeman of an Egg and Poultry Society accepting a gift from a trader shall be expelled at a moments notice without compunction.

The fault, however, is not wholly that of servants but largely due to inadequate remuneration. This is the curse of the co-operative movement in all its branches. Cheapness seems to be the main idea in men and material. Instead of following the practice of the most successful traders, who endeavour to find the best helpers and pay them well, co-operators offer salaries that are totally inadequate for the work done. The result is, either that the most capable men leave for other employment, or are tempted by secret commissions. Tipping is not restricted to railway porters and hotel waiters. Much could be said on this question but mention is enough. A man should not be paid more than he is worth, but it is a false economy to pay him less. It is good management that reaps the profits,

should be the object first and last, as that quantity is secondary in the building up of a successful trade. I know something of the matter for, as you know, my connections with business have been fairly extensive. That is of supreme importance with perishable goods. Some people like venison, game and cheese "high." A "high" egg is only fit for suffragettes and to be externally applied. Unless quality can be secured co-operation will fail, and the sooner the better. The unfortunate thing is that great numbers of producers seem to go on the principle of "What the eye don't see the heart don't grieve for." They appear to think that because it is *their* egg or chicken it ought to be accepted without question by trader and consumer alike. It is not the manufacturer that can tell whether a shoe pinches but the wearer. And the consumer knows better than the producer what is the quality desired.

Perhaps it is too early to expect a complete revolution of methods which have been universal for generations. Bad habits are less easy to get rid of than good ones. Have you ever tried to pass a cracked shilling? You will find that in spite of all you say some of your members will not believe

that values are determined by quality. They appear to have adopted a variant of the old nursery rhyme, as follows :

Eggs hot,
Eggs cold,
Eggs in the pot ten days old.

Anything fresher than that seems to them a mere refinement of superciliousness. The only way is to make them suffer through their purses, and if they won't play fair kick them out. A few drastic expulsions will be healthy.

The fact is that the moral tone requires to be raised, and it will be within your power to do this. The predatory instincts of our freebooting forefathers are by no means dead. These are not restricted to company promoters or chicken thieves. Producers are often just as bad. They seem to think that attempts to deceive traders and consumers is like dodging the income tax or a railway company—it is cleverness not cheating. I fear co-operative societies are not free from this spirit, vide the prosecution some time ago of one of these for selling foreign eggs as Irish. Many tales could be told of trickery of this nature. Whilst it is true that some egg depôts have loyally risen to their opportunities, and have deservedly won for themselves a creditable position, others are always trying to dodge their customers. Stale eggs, dirty eggs, small eggs, are still too common. To sell these for what they really are would be honest. To palm them off as new-laid is the reverse. It should be your object to prevent such chicanery within your own sphere of influence.

The folly of it all is apparent. Production is maintained by demand; demand is maintained by consumption; and consumption is stimulated by supplying what is required in the form and con-

dition that consumers desire. The essential factor is giving value for money. It is a common axiom that "good stuff goes into little bundles." Such may be applied in the case of a wife or a diamond ring, but bulk and quality are inseparable in food stuffs. Chemists tell us they can provide nutritive elements in tabloid form, which will feed the body better than bread and meat. When that comes about then our stomachs will shrink to the size of our eyes. Meanwhile we must take things as they are. It is all a rule of three. If it requires three small eggs to make a pudding or to breakfast a healthy man, where two large ones would suffice, the value of the three is equal to that of the two. All theories of mathematics or of relative elements confirm this view. Therefore the producer of the little eggs must not expect any more for his three than the other man obtains for his two, and has no right to ask for more. But he does. It is quality plus size that determines returns. A yard of silk is worth more than three feet of calico, but I have yet to learn that 30 inches of either material should command the same price as 36.

You have undertaken a hard task, my friend, in which there will be many difficulties ere the end is realised. A modern writer has said "If you can't skim all the cream you want, don't let disappointment sour the milk that is left." It is your business to win to a better state of things. Above all be cheerful. "Never put off till to-morrow a laugh you can laugh to-day." You will win if you maintain your ideals, for there is nothing that can be accomplished without determination and perseverance.

Yours encouragingly,

ENOS MALPAS.

THE INVISIBLE CHICKEN.

ELEVENTH ARTICLE. SOME ODD FEATURES

Written and Illustrated by JAMES SCOTT.



It will be useful if we examine some various items now, before the final stage of hatching arrives. I have, in previous articles, given fairly comprehensive accounts of the most important of features, and the manner of their development. I have shown how scales arise by folding of the skin; how feathers depend on the splitting or branching of hairs; how the eye is fashioned; and so forth. Some illustrated items that I had to omit during the narration of those chapters, can be more conveniently dealt with at the present time.

I have elsewhere explained that the downy feathers which appear at birth are not of this form in the egg; but that the chicken at the moment of birth is covered with what is apparently a sparse layer of hairs. These hairs rapidly

dry and uncurl, thereby resolving themselves into downy feathers.

If the reader feels inclined to have any doubt about the fact of these objects being hairs, the matter can be settled by referring to chickens of early dates. In Fig. 1 are the magnified ends of a few such hairs procured from a twelve day's incubated egg. The extremities are usually somewhat swollen, and therefore quite distinct from their later, pointed, formation when they change to feathers. There is no splitting or branching in evidence at this time, the filaments being simple, smooth, soft extensions from the body. The way in which these hairs arise from the skin is shown in Fig. 2 of Chapter 5.

We shall find, in breaking open eggs of various ages, that some embryo chickens will

be covered with dark hairs, and the remainder with a mixture of both. In this connection it constitutes a very interesting study to follow up the revelation of colour, which always depends on the presence of pigment granules. In some



Fig. 1. A magnified pin-hole view of some hairs at twelve days' growth. These gradually change to downy feathers.

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creatures—butterflies and moths, for instance—the beautiful hues depend on the reflection of light from myriads of fine ridges and furrows that cover the microscopic scales which are dislodged as dust when a person touches one of the insects.

The gorgeous tints of pearl shells are similarly due to light reflected from normally invisible lines. The colours of a soap bubble are caused by the light striking on the host of moving tiny globules of water that compose it. Other instances could be cited to show that many colours are non-existent as *matter*, but rely on the divided rays of light for their occurrence, in a similar way to those produced through a glass prism.

In these feather hairs, however, the yellows, browns, reds, blues, greens, blacks, and so on, are brought into existence by means of tiny solid specks of matter. In a twelve-day's unborn chicken, for instance, I found both pale and dark hairs over the flesh. Upon magnifying one of the first kind it was disclosed as a shaft in which multitudes of scattered dots were contained, as in the top figure of Fig. 2.

Another somewhat greyish hair, revealed under the compound microscope longitudinal rows of the dots gathered together somewhat compactly. A third hair, which was almost black, showed that it was practically crammed full of these densely opaque spots.

The conclusion to arrive at from these obser-

vations is that the pigment granules are distributed with fair evenness over the area of a hair, or other part, and that as their number is increased they collect into regular rows whose diameters widen until they touch.

It is believed, in some quarters, that the reflection of the light helps to provide the varying rainbow tints, or sheen, on feathers; but even if this is so, the fact remains that movable pigment granules exist.

The green of leaves is caused in a similar manner, since myriads of tiny green specks of *chlorophyll*, which can be pushed about with a fine needle or bristle, are visible through the transparent epidermis.

It should be remembered that colourless hairs are nearly transparent, and that the presence of a comparatively small number of dark granules would be disclosed *through* them in the ordinary way, imparting a certain depth of shade thereto. Increase of granules gives rise to very dark hues.

Now the *beginnings* of a scale and a hair are very similar on this occasion. There is hardly any difference between the tiny pimple-like origin of a hair and of a scale, yet one swelling elongates outwardly to form a hair; and another widens and remains depressed to make a scale. All are due to modifications of the *skin*, and not

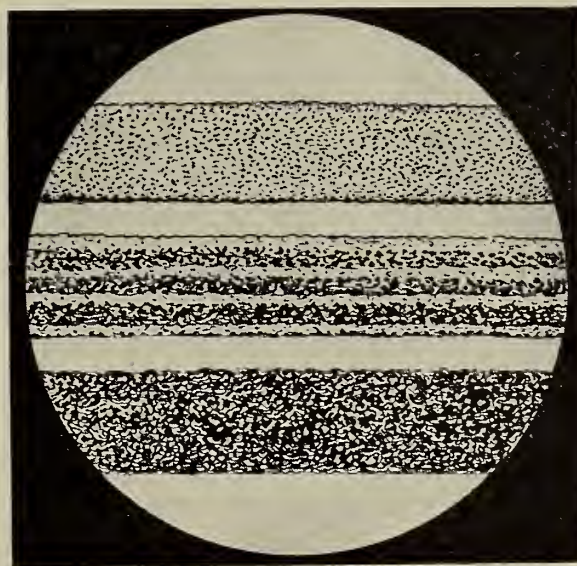


Fig. 2. Greatly magnified portions of light, semi-dark, and dark hairs, showing how pigment granules are responsible for the appearance of colours.

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to any alteration in the flesh.

The beak and its wonderful tooth can now claim attention. In Fig. 4. where the nostril is very evident, the tooth is drawn in proportion on a magnified beak belonging to an incubated chicken of twenty days. It is, however, pro-

minent from very early stages—before the first week has elapsed, indeed—and continues to gain in importance until the time of hatching. It enables the chicken to free itself from its confinement in the manner described in the final chapter.

This white tooth is set in the middle of a whitish disc which is slightly grooved round its edge, and when the beak is somewhat dark the tooth forms a striking contrast to its surround-

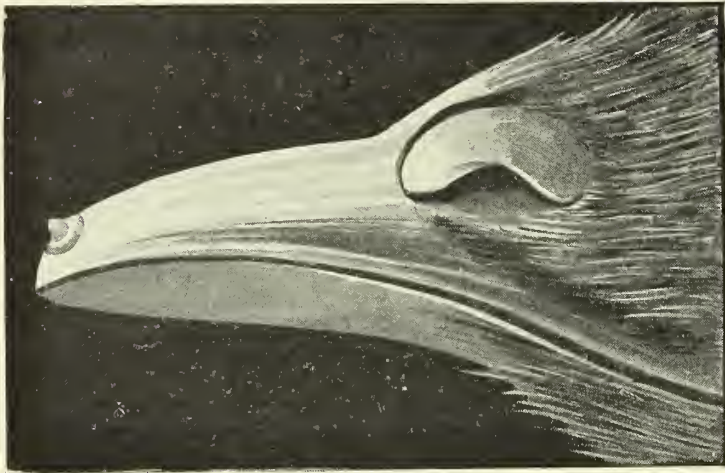


Fig. 3. Greatly magnified beak of twenty days' incubated chicken, showing the "tooth" at the end. Actual length $\frac{3}{8}$ inch.

[Copyright.]

ings. The actual length of the beak shown magnified in Fig. 3 is $\frac{3}{8}$ inch.

In Fig. 4 is shown the appearance of the leg and its adjuncts belonging to an incubated chicken a few days old. I am sure that this portion will come as a very great surprise to most fanciers, since it almost appears as though the young bird possesses the rudiments of a hind pair of wings. The skin and flesh fold over each thigh in a peculiar way, and when viewed from behind, present a likeness to the lower part of a bob tailed coat. I have no wish to discuss this feature, as we may get involved in too many problems. It is not a proper tail. I have elsewhere explained that the fossil bird reptile, the rook-sized *Archcopteryx*, appears to have had the ends of a pair of hind or second wings projecting below the upper, or first pair; but these features really belonged to the upper ones, which are folded in a very curious way. When the wings of the *Archcopteryx* were spread out ready for flight, the bob-tailed objects that had hitherto lain over the thighs, formed the outermost halves of those same wings.

Eggs in New York.

During October, new-laid eggs on this market reached the abnormally high figure of 65 cents. ($2/8\frac{1}{2}$) per dozen retail. What they were in November we have not yet seen.

CORNELL RATION FOR CHICK FEEDING.

(The following circular has been issued by the Department of Poultry Husbandry of Cornell University, N.Y., U.S.A. The term "corn" in it means maize. Editor, I.P.R.)

THE RATION.

Mixture No. 1.—8lbs. rolled oats; 8lbs. bread crumbs or cracker waste; 2lbs. sifted beef scrap (best grade); 1lb. bone meal.

Mixture No. 2.—3lbs. wheat (cracked); 2lbs. cracked corn (fine); 1lb. pinhead oatmeal.

Mixture No. 3.—3lbs. wheat bran; 3lbs. corn meal; 3lbs. wheat middlings; 3lbs. beef scrap (best grade); 1lb. bone meal.

Mixture No. 4.—3lbs. wheat (whole); 2lbs. cracked corn; 1lb. hulled oats.

Mixture No. 5.—3lbs. wheat; 3lbs. cracked corn.

THE METHOD.

1-5 days. Mixture No. 1.—Moistened with sour skimmed milk, fed five times a day; *Mixture No. 2* in shallow tray containing a little of *No. 3* (dry) always before chicks. Shredded green food and fine grit and charcoal scattered over food.

5 days-2 weeks.—*No. 2* in light litter twice a day. *No. 3* moistened with sour skimmed milk, fed

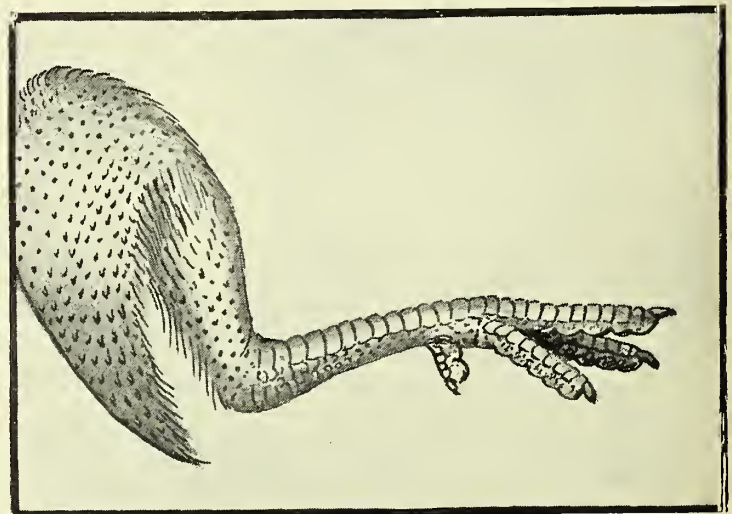


Fig. 4. Magnified leg of embryo chicken, showing the "bob tail" over the thigh, like a hind wing.

[Copyright.]

three times a day; *No. 3* (dry) always available.

2-4 weeks.—As above, except that the moist mash is given twice a day.

4-6 weeks (or until chicks are on range)—Reduce meals of moist mash to one a day; *Mixture No. 4* in litter twice a day; dry mash always available.

6 weeks to maturity.—No. 3 and No. 5 hopper fed. One meal a day of moist mash if it is desired to hasten development.

FURTHER DIRECTIONS.

1. provide fine grit, charcoal, shell and bone from the start; 2. give grass range or plenty of green food; 3. have fresh clean water always available; 4. feed only sweet, wholesome foods; 5. avoid damp and soiled litter; 6. disinfect brooders frequently; 7. test all beef-scrap before feeding; 8. keep chickens active by allowing them to become hungry once daily; 9. feed *moist* mash sparingly; 10. keep *dry* mash always before the chicks.

Cornell Rations for Laying Hens

The following whole grain mixture is fed morning and afternoon in a straw litter:

By weight, winter—60lbs. wheat, 60lbs. corn, 30lbs. oats, 30lbs. buckwheat.

By measure, winter—32 qts. wheat, 36 qts. corn, 30 qts. oats, 20 qts. buckwheat.

By weight, summer—60lbs. wheat, 60lbs. corn, 30lbs. oats.

By measure, summer—32 qts. wheat, 36 qts. corn, 30 qts. oats.

The following mash is fed dry in a hopper kept open during the *afternoon only*:

By weight winter and summer—60lbs. corn meal, 60lbs. wheat middlings, 30lbs. wheat bran, 10lbs. alfalfa meal, 10lbs. oil meal, 50lbs. beef scrap, 1lb. salt.

By measure, winter and summer—57qts. corn meal, 71 qts. wheat middlings, 57qts. wheat bran, 20qts. alfalfa meal, 8qts. oil meal, 43qts. beef scrap, $\frac{1}{2}$ qt. salt.

The fowls should eat about one-half as much mash by weight as whole grain. Regulate the proportion of grain and ground feed by giving a light feeding of grain in the morning and about all they will consume at the afternoon feeding (in time to find grain before dark). In the case of pullets or fowls in heavy laying, restrict both night and morning feeding to induce heavy eating of dry mash, especially in the case of hens. This ration should be supplemented with beets, cabbage, sprouted oats, green clover or other succulent food, unless running on grass covered range. Grit, cracked oyster shell and charcoal should be accessible at all times. Green food should not be fed in a frozen condition. All feed and litter used should be strictly sweet, clean and free from mustiness, mould or decay. Serious losses frequently occur from disease, due to the fowls taking into their bodies, through their intestinal tract or lungs, the spores of the fungus causing moulds.

SOME REASONS FOR FAILURE.

By F. W. PARTON.

(The University, Leeds.)

EVERY year sees a greater number of people swelling the poultry-keeping ranks. Some come to the top of the tree, whether it be the fancy or the utility side they undertake; others jog on in an easy way, doing nothing very brilliant, nor yet anything flagrantly wrong; while there are those who dismally fail, and nothing more is heard of their enterprise, except an occasional wail that poultry-keeping does not pay. Were the reasons for these failures inquired into, it would invariably be found that the excuse "bad luck" has nothing to do with the matter. It is more frequently a case of rank bad management, and the blame lies entirely with the man himself.

Many failures are put down to a start at the wrong time of year. I do not see, however, how this can account for failure, since a successful commencement can be made at the present time of year by the purchase of laying pullets, or an equally successful start may be made a few months later by obtaining sittings of eggs, or newly-hatched chickens. This is only one among many of the excuses given for failure, few of which are really the cause of the trouble. Many failures in poultry keeping—probably more than are due to any other cause—may be attributed to the start, not to the time, but to the manner of starting. It is a fatal mistake to commence on a large scale without first having the necessary experience and knowledge which are so closely linked to success. Experience can best be acquired by commencing in a small way, and then gradually increasing as opportunity permits. This is more important to the man or woman who takes up poultry-keeping with the ultimate object of gaining a livelihood. To them it is a much more serious matter than to those who take it up as a hobby. The latter may indulge in any and every branch, since the financial side does not enter into the question. For the former to succeed he must start on right lines, and the first step in this direction is to start in a small way. Even if the available land is quite extensive, it is better to allow three-quarters of it to remain idle—idle that is, so far as stocking it with fowls is concerned, than to stock to its fullest extent. I know that to many people the temptation is very hard to resist. It is, however, necessary to resist the temptation, and develop as one goes along.

Another, and a very common, cause of failure is that of keeping the wrong kind of stock. There are so many poultry keepers, not only among beginners, but among some of long experience, who pay little or no attention to the economic classification of poultry, that is, the grouping of fowls according to their chief profitable qualities. The fact is not fully recognised that there are breeds suitable for whatever purpose the poultry keeper has in view, whether for early spring

chickens, for winter eggs, or for summer layers. In addition to the breeds possessing special economic qualifications, there are those that possess both qualities, eggs and meat, to a moderate extent. It will thus be seen that there is an abundance of choice to meet every specific requirement in the same way as there are breeds that will thrive under almost any conditions as to soil, etc. which might be fatal for other varieties.

Failure cannot, of course, always be traced to one single fault, since this generally minimises profit, without actually causing failure. Absolute failure is usually the result of a combination of common mistakes. One of the most common is that of overcrowding. This misjudgment is more usual amongst those poultry-keepers who have a very limited amount of land, than amongst those who possess plenty of space. The temptation to overcrowd is one that is somewhat difficult to resist, but it must be fought against if success is to be attained. Not only is the danger restricted to overstocking the land, but also to the housing. This danger is minimised to a certain extent by the open-fronted form of house; at the same time even such houses as these become fruitful sources of disease if the inmates are unduly crowded.

The hatching season is a time when bad management will have a far reaching effect, and is quite capable of spoiling the whole year's work. Both too early and too late hatching are equally bad. Just when the best time is, it is somewhat difficult to state. It should be judged by each individual poultry keeper, since the breeds vary as to the time when their progeny will be most profitable. Spring chickens must be hatched at a time so that they will be ready for consumption in the spring. It thus becomes a very wide question, but, speaking generally, the heavy varieties—those designated as general purpose breeds—should be hatched from the second fortnight in February to the middle of April, while the non-sitting breeds should be hatched in relays, but not till six or seven weeks later. A mistake in the time of hatching, combined with the mismanagement of overcrowding, will have a disastrous result on the year's profit.

To avoid infertile eggs, and chickens dead-in-shell, careful management is required during the mating season. It is, of course, very difficult to give any definite explanation why these failures are so numerous, since the reasons are so many and so various. The weather is the usual complaint, and the previous season's drought with its retarding effect on their growth, or the heavy and continuous rain, and want of sunshine, prove equally good as scapegoats. There is, however, small doubt that breeding from immature stock on both sides is responsible in many cases; but fortunately this can easily be overcome, since it is a matter entirely in the hands of the owner. By judicious mating the danger is avoided. Breeding from birds that are kept in confinement is also a cause of infertility, dead-in-shell, and delicate chickens.

THE POULTRY INDUSTRY IN BRAZIL.

By LEO. L. FURNESS, SAN PAULO (BRAZIL.)

Poultry keeping in this country, I am glad to say is progressing, and there is every reason to believe that before long it will become a great industry. I have been in Brazil about 3 years, and it is wonderful what improvements have taken place during this short space of time. Poultry farms are now springing up in all directions, hundreds and hundreds of first class birds are being imported from the States, England, and France, and the outlook just now appears very rosy and promising. Unhappily as yet we have no poultry exhibitions, a great drawback to the industry, but there is some talk of holding a show early next year in the city of Rio de Janeiro. The Brazilian Minister of Agriculture, Dr. Pedro de Toledo (who by the way is a keen fancier of poultry) has done a lot to help poultry breeding, and has distributed several large sums of money to many breeders, to encourage the rearing of more and better stock. These acts of generosity on his part are worthy of special note because it is a proof that he is keenly interested in the industry, and wishes to see it flourish. We have some very keen breeders here, amongst them Dr. Calmon Vianna, Dr. Reynaldo de Carvalho, Mr. Ugo Leal, Mr. A. J. Azevedo, etc., who all reside in the city of Rio de Janeiro.

In the city of San Paulo, Mr. Frank Upton, Mr. George Baeder, and Count Barbrillini, are all important breeders, and keen students of agriculture. The former gentleman, Mr. Upton, has been in the business about 6 years, and his stud comprises more than 40 varieties. Most of the known breeds are kept here with more or less success, especially White Leghorns, Barred Rocks, and Buff, Black and White Orpingtons. In my opinion (and I have done a lot of experimenting since arriving in this country) the White Leghorns (American type) are the easiest of all breeds to rear to maturity; they grow very fast, resist most of the diseases prevalent in this country, and are very active. As a proof of their popularity, it may be mentioned that they are being bred in larger numbers than any other breed. Mr. George Baeder (an intelligent French fancier of San Paulo city) has over 4,000 head of this breed, and is getting excellent results from them. The modern English Leghorn is not suitable for this climate, since owing to the great heat they soon go off their legs, especially the cocks, and are afterwards useless as breeders. The Barred Plymouth Rock is becoming very popular, and is now in the hands of most fanciers. I imported a very fine pen from Mr. J. Bateman, of Milnthorpe, early this year, which was the admiration of all who saw it. The Orpingtons, are also making a great name for themselves, and just now this variety seems to be booming, and deservedly so. The Whites are my favourites, I consider them the finest fowls on earth. Last January I imported two excellent pens of Blacks and Whites respectively, and they gave me great

satisfaction.

The Pekin ducks are also making many admirers and are being bred in very large quantities for market purposes. They are without a doubt, the best duck for this climate, standing the heat so well, and arriving at maturity very early. Most of the leading English and American incubators are used here, some preferring the hot-air system, and others hot-water. I myself have obtained very good results from both systems. It is, or rather should be a well-known fact, that the climate of Brazil is against successful poultry keeping, unless

Plucking Geese alive.

Arthur Betts, poulterer, of Walsoken, Norfolk, was recently at Grimston sentenced to fourteen days' hard labour for cruelty to a number of geese by plucking out their feathers while alive. The prosecution was undertaken by the Society for the Prevention of Cruelty to Animals. Defendant suggested that the practice was a common one in Norfolk and Lincolnshire. The Chairman said the Bench were determined to stop the practice. Betts's two assistants were each fined £5 for the same offence.



General view of Breeding Pens on a large and successful Poultry Farm in Brazil.

[Copyright.]

proper methods are used, such as leaving all the roosts open the year round, disinfecting them once or twice a week to prevent lice and disease, giving very little maize, or other heating foods, and a hundred more items which can only be learned by those who live in a tropical climate. In my next article I will send along a few photographs of a Brazilian poultry farm, which I hope will prove interesting. I shall also be pleased to supply any information to the readers of this journal about the poultry fancy out here.

Table Poultry in California.

Mr. A. F. Hunter, in the *Reliable Poultry Journal* gives a poor account of chickens in the Los Angeles markets, saying that "these fowls were of the leanest, poorest kind, and with the breasts so thin and flat, that the carving knife would find very, very little breast meat to cut into tempting slices." These were sold at 35 cents ($1/5\frac{1}{2}$) per pound undrawn. The explanation is that Californian fowls are mainly bred for egg production. There ought to be a good opening for breeders of table poultry.

TEN YEARS OF A LECTURER'S LIFE.

PART II.

By C. E. J. WALKEY.



SINCE I came down to Somerset at the beginning of 1903, there is no doubt that very many more pure bred birds are to be seen everywhere, but whether or no that comes from my teaching is a moot point. I think, though, that the birds we had at the Somerset County Experimental Farm may have opened people's eyes to the possibilities of 'laying strains,' although it was the fashion to decry the farm and the work done there. That a buyer should come all the way from Surrey to purchase our birds when the farm was given up certainly made an impression down in the West Country. In those days, except as regards Fanciers, people thought very little of pure bred poultry.

Even to this day I am sometimes told "We think ordinary fowls lay better and are hardier than prize bred ones." In this, as regards some strains of 'prize' bred 'uns, I am not sure but that I agree, but it is a pity that those who keep mongrels should look upon any pure bred fowls, no matter how bred, as prize birds. The fault lay, I think, long ago with those who advertised 'prize strains' and sold only culls from their young stock. This was done to a considerable extent as recently as ten years ago, though the general public are slowly awakening to the fact that profits are not made by buying any but well grown stock, bred hardily, hatched at a decent time of year, from line bred layers. It is a slow awakening truly, but it is there all the same.

In this county one sees great evidence of Minorca blood; Somerset may also be called the home of the Minorca; as in some localities one sees cross-bred Leghorns, or Houdans, everywhere. This again is due to the cheaper text books of a few years since, which almost implored poultry keepers to cross these two breeds by way of improving egg production. One follows a part of the argument, of course, but change of blood properly introduced does much towards improvement, but against this one may lay it down that if the two words 'properly introduced' be overlooked much more harm than good will be done. Far better get a bird of the same kind as one's hens, but as nearly unrelated as possible, than one of an entirely different kind, about the breeding of which one knows nothing, except that it is advertised as of a 'prize strain.'

By the way, this brings me to another point—unrelatedness: A celebrated breeder of Faverolles once told me, in talking about this very thing, of an instance in which a man he knew, posing as a very up-to-date farmer, using trap-nests extensively, went a bad cropper. This man wrote somewhat as follows:—"Dear Sir, Two years ago I bought

Faverolles from you which have done exceedingly well. Will you please send me on — cockerels unrelated to those I had from you then." The reply was "From whom did you buy last year?" And it turned out that the up-to-date one had bought from a man in the North Country who had himself only a few months before purchased all his stock, including those passed on to the correspondent in question, from my friend the breeder. So that he who advertised as never breeding in had been doing so directly. For this reason, if for no other, the Register of Breeds of the Utility Poultry Club—the Stud Book of poultry, so to speak—is of quite remarkable utility, for beyond giving names of the breeders of different breeds and varieties, each man's various 'strains' are mentioned in full. Reference to this Register will show (1) How his birds are mated, (2) Whether they be kept in confinement or have a free run, (3) On what soil they are kept, light or heavy, and such other detail of use to the careful breeder at large.

Further, whatever you do, beware of the advertiser whose name is not in this Register, but who says he has trap-nested layers of twenty years standing; I doubt if such exist, in this country at any rate.

It is certainly a pity that, so far as I know, in so many counties other than Staffordshire, gardening and poultry keeping are kept so much apart from one another, for they really ought to go together all the time. Neither an adult fowl nor a duck is a good gardener, but the young of both are often invaluable, and always there is room for a small pen. I once grew the finest Jerusalem artichokes I have ever grown in a heap of sawdust and poultry manure, cleanings from a cold brooder, though I by no means recommend sawdust for the garden. This heap was in a ditch outside the run, and the parent artichoke got in there by mistake.

Furthermore, poultry manure is good on hot-beds, and with their aid and a really good depth of young grass and nettle cuttings, stable manure can be done without. If lawn cuttings can be had so much the better, for they heat rapidly, but the other two will do quite well. I generally make a hot bed of these each season if stable manure be scarce.

In my scratching sheds and hen houses I litter the floors with burnt and ordinary dry earth, about half and half, and short straw chaff and hay chaff when free from seed; these put in to a depth of about eight inches will keep sweet for four months, and when thoroughly pulverised go out to my garden. The school garden poultry plants might follow me in this, although all the rest of their work must certainly be done under instruction from their own county instructor.

THE RHODE ISLAND RED.

By GEORGE SCOTT,

(Hon. Sec. of the British Rhode Island Red Club.)



PROBABLY no breed of poultry is attracting more attention in the United Kingdom at the present time than the subject of this article, which, only a few years ago was practically unknown to British fanciers. To the best of my knowledge the Rhode Island Red was first introduced into this country some ten years ago, but owing to apathy no organised efforts were made to obtain for the breed the

scheme was doomed to failure, and a well-known poultry writer, in referring to the breed, said, "Some of us are wondering where its popularity over here comes in." It may be judged, however, how successful has been the working of the club when I mention that it is in a sound financial position and has a membership roll exceeding that of many an old established society. Moreover, from my reading of the signs, the club is but in the embryonic



A Very Fine Example of a Rhode Island Red Pullet.

[Copyright.]

Bred by and the property of Mr. E. T. de Graff of Amsterdam, New York. The bird which forms the frontispiece also belongs to Mr. E. T. de Graff.

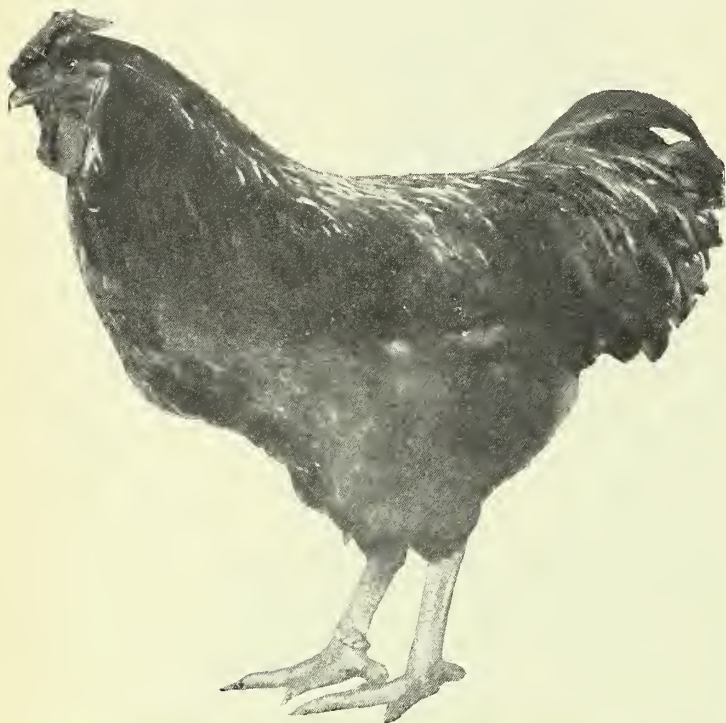
popularity which it deserved, and, for all that the general poultry-keeping public knew respecting its merits, it might have remained in America. For several years the Rhode Island Red stagnated, until in 1908, a few new recruits contrived to stir up a little enthusiasm, and some twelve months later—to be exact, in July, 1909—as a result of the efforts of this small band of workers, a British club was organised for the purpose of providing classes for the breed at shows. When I proposed the formation of this club through the medium of the poultry press, many persons considered that the

stage, and its growth in the future gives promise of being both rapid and extensive.

In America the Rhode Island Red is one of the most popular breeds of the day, and that in a country which has seen the birth of the Plymouth Rock and the Wyandotte, two breeds which have attained world-wide popularity. Since the American "Red" club was inaugurated in 1898, the growth of the breed in popularity, both as a utility and as an exhibition fowl, has been phenomenal. Originated over fifty years ago in Rhode Island, the smallest state of the American Union, its early

history is shrouded in mystery. In those early days it was bred solely for utility purposes, and the farmers and cottagers who were responsible for its introduction cared nothing for the appearance of the fowl; but experience taught them that the use of red males promoted the utility points, which, in their opinion, were all in all, and by the constant use of such birds generation after generation, they finally evolved a fowl in which red was the dominant colour. Much uncertainty exists regarding the origin of the breed, but it undoubtedly owes its utility qualities to the Cochin, Malay, and Brown Leghorn. Possibly other blood may also have been introduced, but on this point we have no authentic information.

If we pause to examine the causes which lead to the rise and decline in popularity of the many breeds and varieties of poultry, we find that in utility qualities we hold the key to the enigma, the open-sesame of the door which leads to success.



A Rhode Island Red Cockerel, belonging to Miss M. H. Clay, South Devon. *[Copyright.]*

Beauty of plumage is a very desirable feature in any variety, but it is not enough in itself to lead to any great measure of popularity; it does not appeal to the general run of poultry keepers. The propelling power is lacking, but in utility qualities we have all the power necessary, provided it is properly wielded, to enable a breed to reach the pinnacle of fame. To the fact of its excellent utility points does the Rhode Island Red owe its great and ever-increasing popularity in the land of its origin, and to a lesser extent in this country. It is noteworthy that this breed was made by utilitarians, solely for utility purposes, regardless of fancy points; which, coupled with fifty years of continuous outbreeding, stamp it as a breed in which utility qualities are predominant features, permeating it to the core.

As a layer of a good-sized brown or tinted egg, the Rhode Island Red plays second fiddle to no breed or variety existent, and its vigour and hardihood—qualities which dominate all others—enable it to continue its work unaffected by the drastic and frequent climatic changes which we experience in these islands. Of course, there are good and bad layers in this, as in every other breed, but the average standard of excellence is a high one. Probably it would be impossible to find a more suitable breed for the farmer, who can let his fowls roam over acres of land to their hearts content, for the Rhode Island Red has the foraging instinct developed to the utmost pitch, and will almost “live on the land,” if given the opportunity. Moreover, the chickens are easy to rear, and inheriting, as they do, the vigour and hardiness of their parents, will reach maturity with very little supervision. Although this breed does best on an extensive range, it must not be supposed that it is unfitted for confined quarters, for wherever fowls of any description can be profitably kept, there will the Rhode Island Red prove itself equal to the best. Especially is it suitable for cold, bleak, exposed positions, where less robust birds would succumb to the rigours of the climate.

Every breed or variety of poultry has certain disadvantages, and after what may be thought, by those unacquainted with the Rhode Island Red, to be a somewhat eulogistic description of its good qualities, it is but just on my part to deal with its failings. As a utility fowl it has one, and one only. The colour of the legs and skin is yellow, and through our gastronomic prejudices, this constitutes a decided disadvantage to what is in every other essential an excellent table fowl.

Considerable difficulty is experienced in breeding Rhode Island Reds true to colour, and although to the utilitarian this is of minor importance, it is undoubtedly a drawback when exhibition points are aimed at. When one considers how the breed was formed, the mixed nature of its antecedents, and the continuous outcrossing which has been going on for many decades, it will readily be seen that the vagaries of colour which are so frequent at the present day, are only what can be expected from the unseen hereditary forces at work. Moreover, the colour of the plumage is one that naturally lends itself to an infinite variety of shades, and because of this, in the standard description of colour no hard and fast rules are given, the great points being evenness, strength, and quality. There are some persons who prefer a variety of fowls in the breeding of which there are some difficulties to be encountered, and some art is required, and to such this breed will especially appeal. Owing to the keenness of present day competition it is difficult to produce specimens of any variety near enough to the standard of excellence necessary to win in the showpen, and, in this respect, I believe the Rhode Island Red will prove less disappointing than many of the popular varieties of to-day.

One other drawback will conclude the list of failings, which certainly cannot be called a formidable one. Rhode Island Reds, especially the females, are liable to moult out a lighter shade of colour each year. This failing, which is common to all red and buff varieties, causes much uncertainty as to the exhibition life, and consequently value, of a bird. Against this and other disadvantages must be credited the fact that there is no necessity for double mating in breeding exhibition specimens, which is a point of no small importance to anyone with limited accommodation.

I am often asked which of the two varieties of "Reds" I consider the better, the single comb, or rose comb. My answer is that both are equal; it is merely a matter of personal taste, though the first-named is undoubtedly by far the more popular on this side of the Atlantic. The single comb variety is of older origin, and was recognised by the American Poultry Association some years before its rose comb confrère. So far it has contrived to retain the lead, but during the past few years American breeders have experienced a largely increased demand for rose combs.

In breeding "Reds," whether for utility or exhibition purposes, the preservation of the correct distinguishing shape must ever be the primary consideration. Therefore in selecting birds for the breeding pen, care must be taken to retain only such specimens, especially on the female side, as answer to the standard description of shape. Look out for the long, oblong body, the long horizontal back, the perpendicular contour of the breast, which combine in making up a somewhat angular, business-like looking fowl.

As regards colour, the great aim of the breeder is to produce birds as nearly as possible of one even shade of rich red throughout. In the males there is a tendency to light straw coloured hackles, but such birds should be eschewed, the contrast between the several parts of the plumage being too severe. The great difficulty in breeding exhibition pullets is to get them evenly coloured throughout, and many fail in having very dark mahogany coloured hackles and light breasts. Undercolour is a point of some importance, inasmuch as it may mean all the difference between a first prize and a commended card. The ideal colour for the concealed portion of the plumage is rich red of a shade harmonising with the surface colour. Black or white in any section of the undercolour, though not a mark of disqualification, counts against a bird in the show pen. Especially is white undesirable, but black, or as it is generally termed "smut," is almost invariably found in conjunction with that strong, rich, brilliant red surface colour which is the primary desideratum in a Rhode Island Red. Therefore, unless the judge be a faddist in this particular, it is only in very keen competition that a little "smut" will affect the issue, for according to the wording of the standard "other things being equal, the specimen having the richest under-colour shall receive the award."

A Rhode Island Red of ideal shape and colour is, I admit, difficult to obtain, but it is not impossible, and when success crowns your efforts, you will agree that it is difficult to conceive of a more



A Rhode Island Red Pullet. *[Copyright.]*

beautiful fowl. The erect, graceful carriage, the rich, brilliant, lustrous plumage of the male, or the more subdued colouring of his mate, combine in forming a fowl of surpassing beauty and elegance.

A big Hatchery.

At Gardena, in South California, is what is called a Hatchery, with a capacity of 80,000 eggs. The incubators are heated by gasoline, and are each about 30ft. long, holding 3,500 to 4,000 eggs.

Poultry Shows.

State aid for poultry shows is being advocated in some parts of the American Union. In fact we believe that in a few cases this has already been done. As a question of education it is justifiable, but for purely fancy displays independence would be dearly lost.

North American Laying Competition.

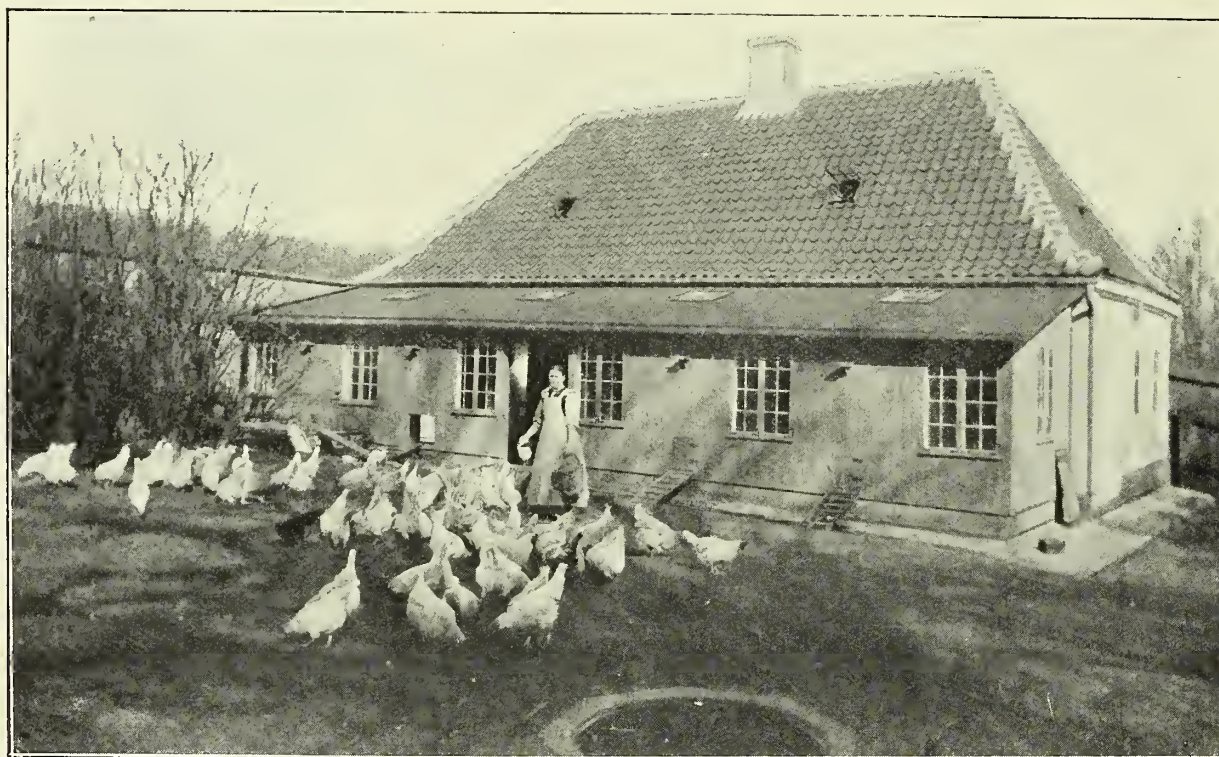
From a report which reaches us for the third week of this competition, ending November 22nd, 1912, two English breeders show up well. Mr. E. Cam's White Wyandottes are first to the date named in that breed, Mr. Tom Barron's White Leghorns are at the head in that section. How much is due to change of venue and of conditions remains to be seen.

A DANISH POULTRY HOUSE.

BY W. A. KOCK.

Nearly all the landed proprietors in our country are interested in poultry keeping as a rule, but not from a fancy point of view. The accompanying photo group is taken at a large country seat, where White Leghorns and Plymouth Rocks are kept in large runs planted with fruit trees.

The poultry house is divided into three sleeping-rooms, and in front of them are built large scratching sheds, furnished with plenty of windows. One of the sleeping-rooms is used only as a laying compartment, and on the floor is laid a thick layer of sand over which the hens must pass, thereby coming with clean legs on the nests.



A Danish Poultry House.

[Copyright.]

Over the ceiling is room for feeding stuff, and coops, etc. The sleeping-rooms are built of brick, and cement is used for the floor, while the floor in the scratching sheds consists of earth with a good layer of sand and road dust.

Can this be true?

One of our South African contemporaries says: "In the new mail contract it is agreed that pure-bred stock from Europe shall be transported to the Union free of charge, but the secretary of the association was informed, in response to his application, that poultry were not included in the regulations. This is much to be regretted, and goes to show that the Government is a long way behind other Colonies in recognising the importance of the poultry industry."

If this is correct, why are poultry not given the same privilege as other stock?

EXTRACTS FROM CONSULAR REPORTS.

Russia.

The egg trade showed an increase in 1911, the total exports having amounted to 3,683,000,000, valued at 8,544,456*l.*, against 2,998,000,000, valued at 6,721,794*l.*, in the year before. Eggs were shipped in greater numbers to the United Kingdom, Germany, Austria-Hungary and Denmark, and the ports of shipment were:—

	1910.	1911.
Riga	1,236,540,000	1,343,149,000
St. Petersburg ...	459,914,000	509,391,000
Libau	24,063,000	19,775,000
Total	1,720,517,000	2,072,315,000

The remainder was exported across the land frontiers principally at Volochisk, Verzhbolovo, Shchipiornsk, Novoselitskoe and Mlava.

Poultry farming—The development of poultry farming naturally received a sharp check in certain parts owing to the poor crops in 1912, but this to a great extent was compensated for by a considerable increase (in some cases by 30 to 35 per cent.) in the northern and central parts of this district and elsewhere. Opinions as to the profitability or otherwise of poultry farming differ, but as a rule the losses are attributable to want of skill and failure to choose a suitable variety of fowl.

Morocco.

The large increase in the export of eggs in 1911 over that of both 1909 and 1910 is due to large purchases for the first time by Spain, whose share was not far short of that of the United Kingdom in 1911.

POULTRY ENTERPRISE IN CANADA.

By WATER JAMES BROWN, AYLMER, ONTARIO, CANADA.



HE poultry industry in Canada seemed to have reached low-water mark in 1910-11; but during the past year it has made considerable progress upward. It was during the off years that the consumers of poultry products felt the pinch of high prices and at the same time realized how excellent these articles were. From being one of the chief among exporting countries, Canada gradually closed her export poultry trade and became an importer of eggs and substitutes for poultry meat. Several consignments of eggs were shipped to the large Canadian cities from China, while frozen rabbits were purchased extensively from Australia. The Canadian hen was not, however, driven from the markets of her own country. She was not able under the conditions that prevailed to supply the local demand.

The daily and the weekly Press, as well as the journals devoted to the industries of agriculture, made every effort to co-operate with the Federal and the various provincial governments, for the purpose of inducing the Canadian farmers to give more attention to poultry raising. The Minister of Agriculture of Alberta shipped to his own province from Ontario a large number of selected birds of utility breeds and good laying strains. These were distributed where it was thought they would do the most good in encouraging the poultry industry in Alberta. The poultry produce houses in the chief cities sent out canvassers among the farmers to organize poultry and egg circles. The Dominion Railway Commission made a number of important rulings reducing and adjusting the express and railway rates with a view to facilitating the shipment of eggs, and poultry, both alive and dressed, as well as egg crates and other containers. For several months, in fact, the whole country seemed to become deeply concerned regarding the scarcity of poultry products, and everything was done that suggested itself to stimulate those identified with the poultry industry to greater activity. The results have been most interesting and most beneficial.

The season of 1912 was excessively wet, and for the most part, cold. These characteristics prevailed for many weeks throughout the greater part of the settled regions of Canada. The effect of the adverse climate on the poultry industry was depressing. The breeding eggs seemed to lack vitality, and not more than twenty-five per cent. on the average hatched. The mortality among the young stock and among the weaker members of the mature flocks was very great indeed. Certain poultry diseases ran through many a farm poultry yard like a plague. The winter of 1911-12 was extremely severe, the coldest on record for sixty years, and surplus grain was either fed or sold as prices were high. This left the average farmer's bins empty. Therefore, during the summer of 1912

the whole subsistence of numerous flocks consisted of insects, water and grass. With such meagre fare the egg yield was low, but the industry is ahead of what it was last year or the year before. In 1911 the poultry on hand in the Province of Ontario numbered 12,942,293, while in 1912 it numbered 13,024,982. The quantity sold in 1911 was 5,011,313, and in 1912 it was 5,505,913. These figures do not tell the whole story. The other provinces of the Dominion have made corresponding gains. The quality in 1912 was better, both in eggs and dressed poultry, than in 1911. The lessons of economic production and successful marketing are beginning to be learned. There are still hundreds of thousands of dozen of eggs, and tons of poultry that are marketed each year which reflect the ignorance and carelessness of poultry keepers. There is, however, more effort being made by the farming community generally, to take better care of the poultry flocks, to keep them under more sanitary conditions, to feed them better and to sell the eggs and dressed poultry in more attractive and satisfactory shape. The industry is looming up in the mind of the public, and is gradually becoming of sufficient importance to merit the attention of the farmer himself.

The prices of eggs and poultry are averaging well this season. On the Toronto "Farmers' Market," new laid eggs sell for 50 cents to 60 cents per dozen; spring chickens at 18 cents to 20 cents per pound; fowls, 14 cents to 16 cents; geese, 16 cents to 17 cents; ducks, 18 cents to 20 cents; and turkeys, 22 cents to 25 cents. Toronto wholesale prices are: cold storage eggs, 26 cents to 28 cents per dozen in case lots; fresh eggs, 31 cents to 33 cents; and strictly new-laid eggs 40 cents to 45 cents per dozen. Live chickens (unfattened) per pound, 10 cents to 11 cents; ducks, 11 cents to 13 cents; turkeys, 15 cents to 17 cents; geese, 9 cents to 10 cents. Dressed poultry sell from 2 cents to 3 cents above the quotations for live weight, except turkeys which sell at 20 cents to 24 cents per pound. The Montreal markets quote country produce prices for eggs as follows: selected eggs 30 cents to 31 cents per dozen, while No. 2 stock eggs sell at 21 cents to 22 cents per dozen in quantities. The term "fresh eggs" is a misnomer. In the markets of Ontario it may mean fresh out of storage or fresh out of pickle. A lady in a western Ontario city told a cold storage man that her grocer always sold strictly new laid eggs. She was not aware and she was not enlightened that the cold storage man had that very day sold to the said grocer 30 crates of cold storage eggs, each containing 36 dozen. The egg dealers have a new term of classification, namely, "really strictly new-laid eggs." Most of the eggs that are sold by the grocers during the late autumn and winter months are gathered in June and July. They are usually fertilized and the depreciation is heavy. Prof. W.

R. Graham, of the Ontario Agricultural College, has estimated that the farmers of Ontario alone lose \$52,000 a year, by allowing the cocks to run with the hens after the breeding season.

Co-operative effort among poultry keepers has brought encouraging results in numerous instances. In one county in the Province of Ontario where the farmers during the past two years have carried out a plan of co-operation, they realized from one to three cents per dozen more for their eggs in summer, and from four to fifteen cents per dozen more in winter than the egg producers operating independently. By careful production and thorough classification, the farmers co-operating were successful in eliminating the seventeen per cent shrinkage suffered by those who sell their eggs regardless of size, colour, age or quality. Seven co-operative associations in one county shipped during the season, eggs to the value of \$20,686.

While the hope of the poultry industry of Canada lies in the small flocks of hens, ducks, geese and turkeys kept on the average farm, yet poultry farming as a speciality is each year attracting increased attention. The man or woman who has only a city or town back lot on which to establish a poultry yard, is developing this industry within the limits prescribed with great avidity. Special breeding and commercial poultry farms are multiplying in number as rapidly as trained managers are available to make them profitable. More people each season are studying the subject of fattening poultry for market. Last year several expert feeders were brought over from the United States to fatten the chickens required for the Christmas market. The men engaged in this trade and the poultry produce houses that employed these expert feeders claimed that it was an exceedingly profitable venture and netted them not less than 50 per cent on the whole outlay.

Canadian fruit growers are taking a great interest in the subject of poultry raising. The two industries co-ordinate splendidly. As this country has a promising future as a fruit growing area, we may look for corresponding expansion in poultry raising as well. One fruit grower in Elgin county on the north shore of Lake Erie, recently made the assertion that he considered the keeping of poultry essential to successful fruit growing as a specialized branch of horticulture. The fowls not only helped him to keep insect life under control, and enriched the areas and pulverized the soil where they were for the time being concentrated, but they added considerably to his annual profits. Many other men in the same line of business confirm this view. It is the claim of poultry enthusiasts that for the investment of money and time and labour, poultry will yield better returns than any other live stock that may be kept on a farm whether large or small. Fruit specialists claim that fruit growing in the sections of Canada suitable for it, is beyond doubt the most profitable of all the industries of agriculture.

COOKING CAPONS.

Choose a fine plump bird and hang it for at least two days before cooking, or if a cold airy place is available and the weather is what it ought to be in winter, the flesh will be vastly improved if a much longer time is allowed to elapse between killing and cooking. As a rule a very good guide is to pluck two or three feathers, and if these come out easily, it is quite safe to proceed with the dressing of the bird which forms a most delicious and appetising dish cooked and served according to any of the following methods:

Roast Capon with Cream Stuffing: When the bird is ready, prepare and truss it in the usual way and stuff it with a forcemeat prepared as below, then tie several folds of well greased paper over the breast and roast it either before a clear fire or in a well heated, but moderate oven. When done enough, carefully remove the paper and all the fastenings used in trussing, and place the bird on a hot dish, garnish it with slices or quarters of fresh lemon, dainty little rolls of fried bacon and sprigs of parsley, and serve the whole very hot accompanied by some creamy brown sauce pleasantly flavoured with mushroom ketchup. To prepare the forcemeat proceed as follows: Soak a pint of breadcrumbs in cream and when fully swollen out add to them the liver of the bird which has been boiled and finely minced, four ounces of finely shredded beef suet, a dozen button mushrooms fried and cut in small pieces, a dessertspoonful of chopped parsley and a seasoning of salt, pepper, and grated nutmeg; mix well, moisten thoroughly with well beaten eggs and use as directed. If any of the forcemeat is left over after stuffing the bird, make it up into tiny balls, which, after being fried until nicely browned and quite crisp, may be added to the garnishing.

Boiled Capon: Prepare in the usual manner a well hung plump capon, then truss it firmly and wrap it entirely in thin muslin which has been liberally buttered; plunge it into boiling stock or water, add salt and flavouring vegetables if necessary, and when boiling point has again been reached, draw the pan on one side and simmer gently until the cooking is satisfactorily accomplished. Take the bird up carefully, and after removing the muslin, place it on a hot dish and surround it with a full close border of cauliflowers which have been first boiled then divided into small neat sprigs. Sprinkle the capon with a mixture of finely minced parsley and sifted egg yolk, coat the cauliflower sprigs with well-made bechamel sauce, and serve very hot with more sauce in a well-heated sauce tureen.

Stewed Capon: Blanch and boil as for curry three quarters of a pound of fine Patna rice, and, while it is cooking, fry in plenty of pure fat half-a-dozen medium sized onions cut in slices, and a fine plump capon which has been cut up into small joints and pieces, just a convenient size for serving. When lightly browned all over drain the fat off very carefully and put the onions and the capon

into a stewpan with sufficient pleasantly flavoured stock to cover them entirely and stew very gently until done enough. When the rice is quite soft and well swollen out, drain it thoroughly if any liquid remains, and season it well with salt and pepper, lemon juice, and chopped parsley, then spread it out in a neatly shaped flat bed on a hot dish, and upon this arrange the capon. Garnish round the edge of the dish with hot hard boiled eggs cut in halves, and glazed onions; or if preferred, with poached eggs neatly trimmed and placed on small crisp croûtons which have been skilfully fried and well drained, and serve very hot accompanied by some well flavoured creamy gravy, or some favourite suitable sauce.

Capon a la Francaise: When a little additional expense is not objected to, the following is a method to be highly recommended. Prepare a forcemeat in the usual manner with six ounces of fine stale breadcrumbs, a large tablespoonful of minced parsley, two ounces of fresh butter, a dozen oysters, cut in pieces, and a seasoning of salt and pepper; moisten with the oyster liquor and mix thoroughly, then stuff a properly prepared well hung capon with this dainty forcemeat. Truss, and boil the bird as gently as possible in sufficient pleasantly flavoured stock to cover it quite, and when done enough remove the fastenings and place the capon on its dish. Have ready three quarters of a pint of well made white sauce and add to it another ounce of fresh butter, the beaten yolks of three fresh eggs, and a tablespoonful of strained lemon juice, and, last of all, a dozen oysters cut in halves; stir over a gentle heat until the sauce is quite hot without boiling, then pour it carefully over the bird, garnish the dish with fresh parsley and serve with or without sauce according to taste.

Creamed Capon: Any meat that remains on either a roast, boiled, or stewed capon may, with great advantage, be re-dressed as follows: Free the meat very carefully from all skin, gristle, etc., and first chop it, then pound it in a mortar until perfectly smooth; season pleasantly with salt and pepper, and moisten with beaten eggs, then add a few tablespoonfuls of thick cream and mix thoroughly. Put the preparation into well-buttered cup moulds, leaving room for the cream to rise, cover the tops with buttered paper, and steam over plenty of steadily boiling water for about twenty minutes, or longer if necessary. When firmly set turn the creams out carefully on to a hot dish and coat them nicely with a small quantity of maître d'hotel sauce; pour a little more sauce round about and serve very hot.

Dear Turkeys in America.

The high prices of Turkeys in the United States at Thanksgiving this year, said to be an advance of 2d. to 4d. per pound as compared with preceding years, is attributed by the New York correspondent of the *Daily Chronicle* to cold storage plants buying up birds all over the country, and "cornering" the supply.

POULTRY EXPERT LIBELLED.

BROOMHEAD v. CARL AND OTHERS.

(Before MR. JUSTICE AVORY and a Common Jury.)

In this case, the hearing of which lasted three days, Mr. William W. Broomhead claimed damages for libel against Mr. Frederick Carl, the Poultry Press (Limited), and Messrs. J. G. Hammond and Co. (Limited), three actions against whom were consolidated.

Mr. E. H. Coombe and Mr. J. M. Diggle appeared for the plaintiff; Mr. R. Bankes, K.C., and Mr. Artemus Jones for the defendants.

The plaintiff is a journalist and poultry expert, and earns fees by acting as judge of poultry at shows. The defendants are respectively the editor, proprietors, and printers of a newspaper called the *Poultry World*. It appeared that in December, 1910, the plaintiff, who was acting as a judge at a show at Caterham, awarded a prize for a cock exhibited by a firm trading under the name of the Brockhurst Poultry Farm, of which firm his younger brother, under the name of "M. Taylor," was partner and manager. In the following January the plaintiff was acting as judge at a show at Southall, and selected a certain bird for a prize, but his co-judge differed from him. The umpire upheld the plaintiff's decision, and the prize was awarded accordingly. This bird was exhibited by the Brockhurst Poultry Farm, and turned out to be the same bird as had won the prize at the Caterham show, but the plaintiff alleged that at the time of judging, he was not aware that it was the same bird or even that it had come from the farm in which his brother was interested.

The alleged libels consisted of a lengthy series of extracts from articles that had appeared in the *Poultry World* between March 24th and June 30th, 1911, the first being headed "The 'Brockhurst P.F.' Scandal," and the last closing with a number of stanzas. These extracts the plaintiff alleged to suggest that he had acted corruptly as a judge, that he had a pecuniary interest in the birds shown by his brother, and was unfit to be a judge. He also alleged that as a result of these attacks he lost employment and fees as a judge.

The defendants relied on the articles as a whole, denied the alleged defamatory meanings, and pleaded that the facts stated by them were true and the comments thereon *bona fide* comments made, without malice, in a matter of public interest. The articles in question did not directly attribute to the plaintiff that he had a pecuniary interest in the farm, but said that "it is reported (how true it is we know not) that when M. Taylor Broomhead started in his business his two other brothers advanced him money to carry on the Brockhurst Poultry Farm." The plaintiff denied that he had so advanced money or had any interest in the farm.

The plaintiff tendered evidence to show a malicious motive on the part of the defendant

Carl, including the fact that, shortly before the appearance of the impeached articles, he had been blackballed by the council of the Poultry Club, the plaintiff being present and voting against him.

The jury found a verdict for the plaintiff and assessed the damages at £80, apportioning £70 against the editor, and £5 each against the proprietors and publishers respectively.

A stay of execution was granted on the usual terms.—*The Times*, 4/12/1912.

"THE SPORT OF PRINCES."⁽¹⁾

Such is the designation given in an old treatise, to cock-fighting, which, however, was by no means restricted, for as stated in the valuable work by Sir Walter Gilbey, recently published, the love of cocking permeated Society from top to bottom. Even schoolboys, at one period shared in it, and there were those who regarded it as a formative influence upon the national character, of whom even a few remain with us, lamenting the legal



"Now, Master George, what do you think of the black breasted red?"

After Henry Alken, 1823.]

By courtesy of Messrs. Vinton & Co., Ltd.

Australian Poultry in London.

The *Sydney Mail* says: "Mr. Holloway, a South Australian farmer, sent (through the Government Freezing Works), a consignment of Plymouth Rock poultry to the London market. The fowls were four months old and their weight when dressed was 5¼lbs. each. They realised 9½d. per pound net, or equivalent to 4s. 4d. each. The same birds would, it is said, not have brought more than 2s. each where they were reared. The result of the shipment reads well, but Mr. Holloway could have sent his birds to Sydney and got the same or better prices. Chickens four months old, weighing 10½lbs. a pair, would be rushed by our poultrymen, at fancy prices."

prohibition enacted nearly seventy years ago. As the author well states, referring to the rules for mains adopted.

"Some of these rules betray a callousness almost incredible; but they express the mental attitude of a rude age towards physical suffering. The rules are what might be expected of the times in which cocking flourished."

It will be seen, therefore, that this work is historical, and does not seek to advocate the sport referred to.

One fact is clearly brought out in the introduction,

(1) "Sport in the Olden Time," by Sir Walter Gilbey, Bart. London: Vinton & Co., Ltd., 117 pp., illustrated, 5s. net.

namely, the many terms used in common parlance which originated in connection with cocking.

The history of the sport is traced from ancient days, but no further light is thrown upon when introduced into Britain. References are made to the association with Shrove Tuesday, more especially in rural schools. We note that as far back as the fourteenth century King Edward III. called upon the city authorities (of London) to forbid cock-fighting within its precincts. It was long after however, that the sport was stopped. Men of influence, inclusive of high placed churchmen, were ardent devotees, as were some of our reigning monarchs, notably Henry VII., Charles II., and William III.

Throughout the story is well and carefully told until prohibition was enacted in 1849, though that did not, and has not, completely ended the sport, for still it is carried out surreptitiously. One very interesting section deals with the superstitions which gathered around the cockpit, such as placing game fowls' eggs in a Magpie's nest and so on, of which the following are examples:

"Another very strange idea held in Shropshire was

that bread which had been consecrated for the Holy Communion would give unrivalled strength and stamina to the cock that ate it: and to obtain possession, cockers would attend at the altar and secrete the morsel of bread given them by the officiating clergyman.

Again, it was firmly believed that if the dust swept from the communion table were sprinkled in the pit, this would avert all evil influences and charms, and ensure victory to the best bird."

The book is beautifully printed, and is illustrated by a series of reproductions from old paintings and prints which add greatly to its value.

An Egg and Hatching Register.

We have received from Messrs. A. Thorpe and Sons, of Rye, Sussex, the well-known poultry and game food manufacturers, a copy of an egg and hatching register, arranged in a most convenient form, and well bound in stiff covers. Many thousands of them have already been sent to their customers, but we understand there are still a few left, and these will be sent to all new customers on receipt of their orders.



Portraits of a rich Birchen Duckwing Cock, which fought many battles and won a Welsh Main of 16 Cocks, Duckwing Hen and Wheaton Hen. This picture formed the prize at a Welsh Main at Newmarket in February, 1832.

[By courtesy of Messrs. Vinton & Co., Ltd.]

THE SCOTTISH POULTRY ESTABLISHMENT OF MR. ROBERT MILLER, STIRLINGSHIRE POULTRY FARM, DENNY, SCOTLAND.

Poultry farming on a large scale in Scotland is only in its infancy. As a matter of fact, poultry keeping on even a small scale has not made the same rapid progress north of the Tweed as it has in other parts of the United Kingdom. The Scotsman is not eager to surrender long-established customs, and he has been slow in adopting the newer and more up-to-date methods by which alone poultry keeping can be made to pay. Cottagers in Scotland, with few exceptions, keep poultry in a small way, and in many of the mining centres keen fanciers are to be found, but poultry farming pure and simple is not prevalent. This is all the more surprising when it is borne in mind that the possibilities of the industry are so vast. Prices for poultry produce in Scotland range high, while the demand invariably exceeds the supply. Besides this the Scottish poultry fancy is a strong one and is increasing year by year.

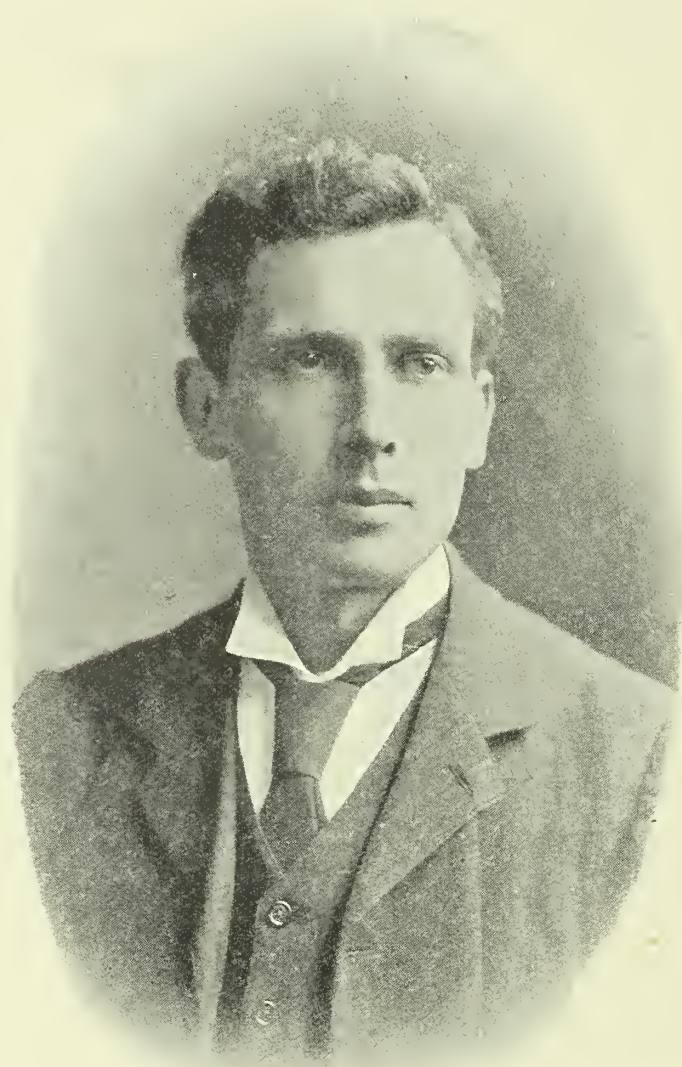
Among those who have helped in the advancement of the poultry industry in Scotland is Mr. Robert Miller, of the Stirlingshire Poultry Farm, Denny. For one thing he is the pioneer of the day-old chicken business in Scotland; for another, he is probably the largest poultry appliance maker north of the Tweed; and for

still another he runs an extensive poultry farm, and supplies stock birds of many breeds and varieties.

Special mention may also be made of the fact that Mr. Miller has introduced a new variety of poultry, namely, the Exchequer Leghorn. Previous to putting them before the public he had been experimenting with them for several years, and after testing most severely their utility qualities he was convinced that as layers the hens surpassed even his own expectations.

The Exchequer Leghorns possess some excellent points. They mature very rapidly, and if looked after well will commence to lay when they are four or five months old. In fact, many of them have commenced when three and a half months of age. In addition to being early layers, they are most persistent layers, even throughout the stormiest winter weather, and being non-sitters they quite excel themselves during the spring,

summer and autumn. The Exchequer Leghorn is an exceedingly sprightly bird, very active and an excellent forager. It is very hardy and capable of withstanding the effects of climatic variations. Besides possessing valuable utility characteristics, this breed has a



Mr. Robert Miller.

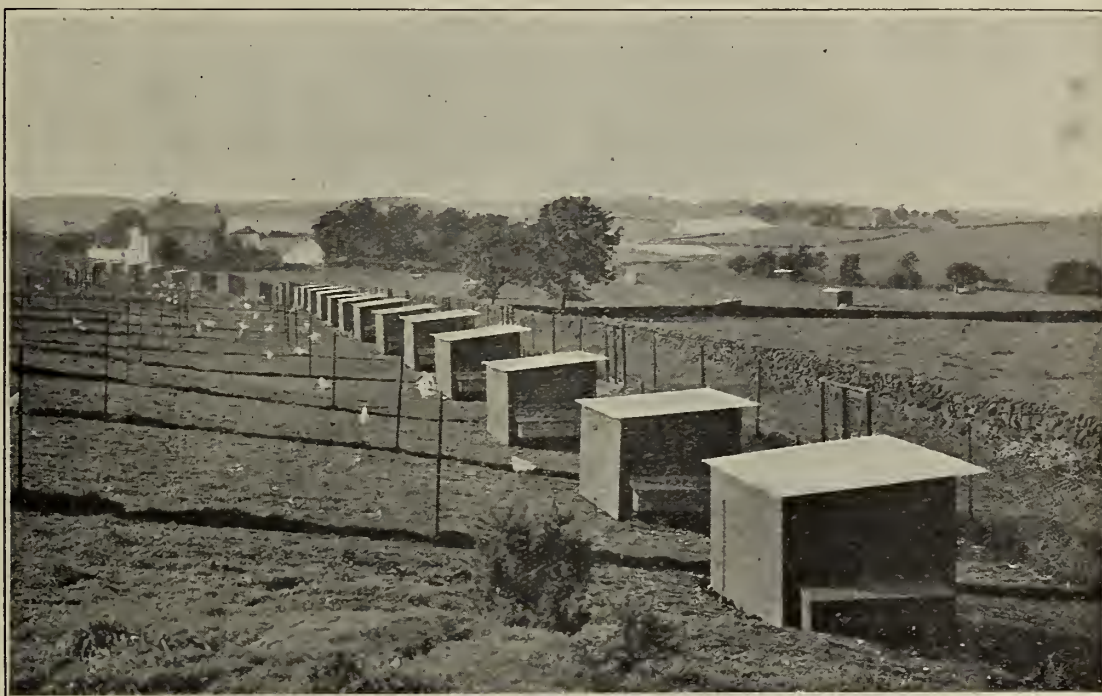
most striking appearance. It has the true Leghorn type, with beautiful yellow legs and beak, while the plumage is checked black and white. Among the other breeds and varieties kept at the Stirlingshire poultry farm, may be mentioned white, black, and cuckoo Leghorns, Rhode Island Reds, buff Orpingtons, and white and black Wyandottes.

As already mentioned Mr. Miller is the pioneer of the day-old chicken trade in Scotland. The proportions to which this side of his business has grown is truly stupendous. Perhaps its steady growth is one of its best features. In 1905, 4,000 chickens were hatched and disposed of; in 1906, 16,000; in 1907, 32,000; in 1908, 48,000; in 1909, 56,000; in 1910, 66,000; in 1911, nearly 74,000; while during the year which has just

closed he has hatched nearly 90,000. Most of the chickens are sent off to their new homes within twenty-four hours of being hatched. The chickens are packed in cardboard boxes, each of which holds comfortably a dozen birds. It is very seldom indeed that a single bird comes by a mishap.

The biggest part of the business at the Stirlingshire poultry farm is embraced in the hatching and despatch of chickens, but it is not the only one by any means; chickens have to be reared for egg laying, and also for the purpose of filling vacancies in the general stock. Mr. Miller rears annually, to maturity about 2,500 birds, and the general adult stock on the farm ranges from 2,700 to 5,000, according to the time of year. For 1913 he has increased his breeding stock by about 400 head. In addition to the despatching of day-old

chickens, a large trade is also done in providing fanciers with settings of eggs, the strain from the Stirlingshire poultry farm being a favourite everywhere. At one time both eggs and chickens were imported from England by fanciers in Scotland, but the tide has turned. It is now recognised that the breeds which thrive in the severe northern climate are likely to



A range of Breeding Pens.

do well in places where the conditions are not so severe, and as Mr. Miller's place is not the most genial place even in Scotland with regard to climate, the chicks and settings from the farm are of a strain that is likely to thrive, and that vigorously. But in order that there should be no debilitating or weakening of his stocks, strong young birds are introduced into it every year. The breeding stock are never kept longer than two years, and are then sent to the market, where they are usually purchased by fanciers who desire a good strain. At the end of the season, eggs, which are now becoming scarce, are also forwarded to the market for table purposes, and good prices are obtained.

The farm consists of 112 acres, 40 acres of which is under poultry. This is capitally planned out, and both the confined run and the colony systems are employed. Part of the place is laid out in breeding pens, while part is devoted to portable houses, scattered far and wide about the fields. There is an excellent chicken rearing field, sloping towards the south, while there is a larger one where the chickens are put when they are graded into their respective sizes. The soil is free and sandy, with excellent herbage; it is also well drained, an extremely important point in chicken raising.

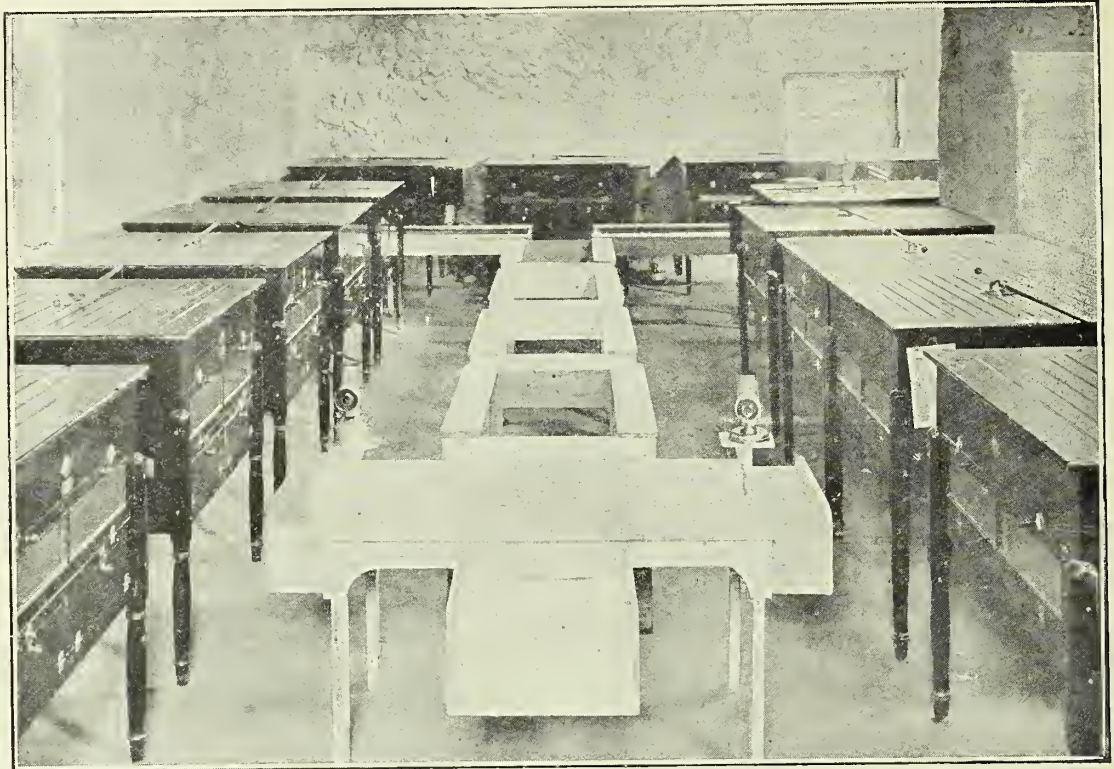


A typical Exchequer Leghorn

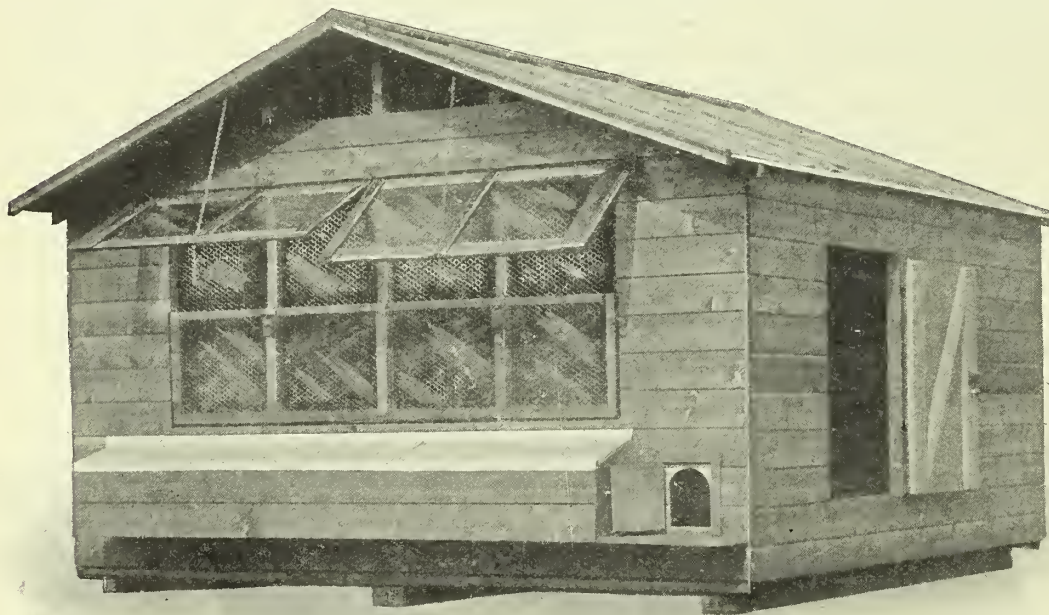
The buildings upon the farm really deserve a detailed description, for they are splendidly constructed and erected upon most up-to-date lines. There is a large egg room, built of stone and lime with a concrete floor. The incubator houses are among the best we have seen, and they are erected on Mr. Miller's own plans. There are three houses altogether, and they contain the following number of incubators:—No. 1, fourteen incubators, egg capacity 400 eggs each; No. 2, twenty-two incubators, 400 eggs each; No. 3, seventeen incubators, 400 eggs each. The third house has only been built recently, and is a slight improvement on Nos. 1 and 2. With such excellent incubator houses it is small wonder that the hatching results are so uniformly good. The brooder house is likewise built upon the latest plan. It

contains sixteen indoor brooders, each with a capacity of 160 chickens.

A very important feature of Mr. Miller's business is the manufacture of poultry appli-



There is incubator accommodation for 23,000 eggs at one time In 1912, 84,000 chicks were hatched.



Mr. Robert Miller's Paradise poultry house, admirably suited for either colony or intensive use.

ances. Among the most successful appliances turned out by this modern and splendidly equipped poultry farm may be mentioned the patent "Ideal" incubators and brooders. The

incubator is of the hot-air type, and its regulation and manipulation are of the simplest. Moisture is supplied to the eggs by a quite new and simple method which Mr. Miller claims to be a radical improvement, and judging from the opinions of users his contention seems to be well maintained. Mr. Miller, of course, employs this machine upon his own farm, and during the last two seasons has had

several hatches as large as 93 per cent. as late as September, when eggs are failing in strength. The brooder, too, is excellently arranged, ensuring a plentiful supply of pure fresh air to the chickens, so important a factor in successful chicken rearing. Some capital forms of houses are made by Mr. Miller, several of them containing novel, and at the same time good features. Mr. Miller's appliances are manufactured at Bonnybridge, six miles distant from the farm.

There he has large and convenient workshops which are busy all the year round. The workshops are in direct telephone communication with the offices at the farm, from which all departments are controlled.

Everything the poultry-keeper wants is supplied by Mr. Miller, and we advise our readers to write for one of his 1913 catalogues, containing complete information about his farm, his stock and his appliances.



From 4,000-5,000 Chicks are hatched weekly in the season.

At top, the nine incubator drawers contain 1200 Chicks just removed from the incubators. These have not yet tasted food. The three indoor brooders contain about 400 (two-day old) chicks—scratching hard for a living.

CHICKEN REARING ON AN INTENSIVE SYSTEM.

During the spring and summer of 1912 an interesting trial of an intensive system of rearing of chickens for the table was conducted in the neighbourhood of London by a gentleman (Mr. F. G. Paynter) who has supplied detailed information as to his methods and financial returns. The aim was to produce first-class table chickens at a minimum cost and under conditions which would obtain on an average small holding; and though it is, of course, impossible to draw definite conclusions from one year's work, an account of the details of management and the results up to the present can hardly fail to be of interest to small holders and to poultry keepers generally. It is perhaps necessary to add that the lines of management followed were those which had been found successful in similar trials conducted during the previous five or six years.

The "holding" on which the work was done consists of a grass field $3\frac{1}{2}$ acres in extent; the soil is of a fairly light character and is well drained, while the field is comparatively well sheltered by trees and hedgerows, but no natural shelter exists in the runs, and this fact may possibly account to some extent for a comparatively high death-rate among the chickens during the hot weather in July. An essential feature of the management was the fact that no adult birds were kept; this enables the holder to devote all his attention to the chickens, and, to a very great extent—perhaps more than will be realised by those who have not tested the point—reduces the risk of outbreaks of infectious disease. The object was to produce from 100 to 120 chickens a week, this number, with careful and methodical management, being estimated to occupy the greater part of the small holder's time during the spring and summer months. It is important that incubation should begin in December, so as to have the first chickens hatched at the beginning of January; but owing to unavoidable delay, hatching this year did not commence until the 13th February. The experience gained in the previous trials had shown that, owing both to low prices and to chickens thriving unsatisfactorily in autumn, it is not advisable to continue hatching after the end of June. As the chickens are sold at the age of from twelve to sixteen weeks, the small holder has under this system two or three months in which he can pursue other occupations, and during two or three of the remaining months only part of his time is occupied with poultry. Another very important consequence of this arrangement is that the ground is entirely freed from poultry for several months in each year, and if 7 or 8 acres are available it would be possible to change the site of the pens each year, so that the ground would receive a rest of about eighteen months for every six months that it was occupied by poultry. In the intervening seasons a crop of hay might be secured.

As no adult stock are kept, arrangements were

made to purchase eggs of breeds fairly suitable for table purposes; in 1912 it was found that on an average two eggs were required for every chicken reared. For hatching, four incubators were required, three being in constant use and one reserved for emergencies. Chickens were kept in foster-mothers for the first six or eight weeks, and afterwards placed in the runs. Considerable attention was given to the method of heating and ventilating the foster-mothers, in order that the heated atmosphere within them might not prove injurious to the chickens. The success of the system depends to no small extent on the exercise of thought and care in this matter. Each run was about 12 yards by 100 yards, and accommodated one week's hatching, that is, from 100 to 120 chickens. In each run two small Sussex chicken "arks" provided sleeping accommodation. These were provided with slatted floors and a pair of wheels, and could be moved readily from place to place.

Feeding.—The preparation of the food and the feeding of the birds were carried out very carefully and systematically, and every effort was made to reduce the amount of labour.

No trough feeding or cramming was practised, and only those foods which could be purchased in bulk in any part of the country were used, while advantage was taken of fluctuation in market rates so that *fresh* material of the very best quality was obtained at economical prices. Without going into details, the character of the feeding can be roughly indicated by placing the different foods used in order according to the quantity consumed during the season:—Wheat 10,978 lb., fine sharps 7,888 lb., biscuit meal 3,257 lb., barley meal 1,827 lb., meat meal and green bone 1,586 lb., bran 1,224 lb., maize 703 lb., rice 370 lb., oatmeal 359 lb., and fat 28 lb.; in addition about 2,000 lb. of mixed chick feed was used. It may be noted that milk formed no part of the regular diet, as it could not be obtained at a reasonable price. The food for each pen was weighed or measured, and careful observation made as to whether the quantity was readily cleared up or not, so that suitable adjustment could be made at the following meal. An ample supply of sharp flint grit was provided, and water was supplied in earthenware troughs. In the runs, despite the heavy stocking, a good growth of grass was always available for the birds.

If, as had been intended, operations could have commenced in December, the first consignment of chickens would have been ready to sell early in April; owing, however, to circumstances already mentioned, marketing did not commence until 28th May. Special importance is attached to sales in the earlier part of the year, as the best prices are obtained in April and May, and poulterers accept much smaller birds at that time, entailing a smaller expenditure of food. It is interesting to note that

Hatching Season Now Commences.

To end well must mean to begin well. A successful hatching season begins with procuring the right Incubator—one that gives the best results in the hands of the novice under any atmospheric conditions. If you contemplate purchasing an Incubator you will do well to consult the

TAMLIN INCUBATOR

Catalogue in its voluminous form of hundreds of letters from the users of the TAMLIN, reciting their experiences and results obtained—not a glorified statement made by the manufacturer, but by the actual users in every part of the globe. Such testimonies for results under different climatical conditions cannot be produced by any other incubator in the World, except the TAMLIN; just one of the reasons for its large export demand, which in itself is equal to the trade done altogether by any of its competitors. A good reason too, for these results under these climatical conditions are obtained without coaxing.

You should send for a copy of this book; it is the most beautiful Catalogue issued in the whole trade, with 250 illustrations of different Appliances for Poultry Keepers & Breeders, and its photographic reproductions of some of the largest Poultry Farms in different parts of the World where the TAMLINS are installed. It is most interesting reading, and is free, and post free.

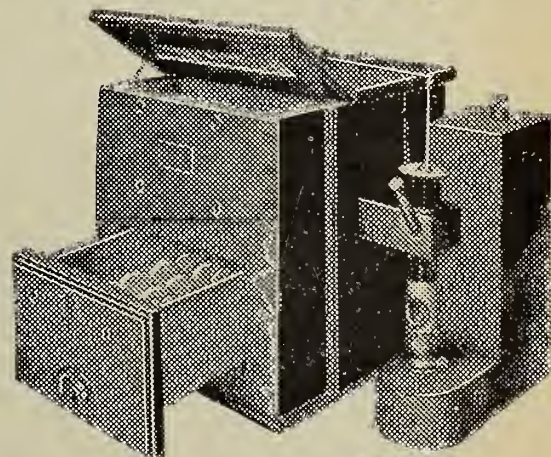
W. TAMLIN,

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**The largest Incubator and
Poultry Appliance Manu-
facturer in the World.**



Tamlin's Incubator and
Self-Supply Lamp.

Agents:

FRANCE.

A. Masson, La Ferte-Milon.

BELGIUM.

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PORTUGAL—

H. Mascarenhas, Lisbon.

SWITZERLAND—

Ed. Baron, Geneva.

ITALY—

G. Barralla, Como.
Georgian Agricultural Society,
Tiflis, Caucasus Russia.

BRAZIL—

Edward B. Lawson, Rio Grande
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NEW ZEALAND—

A. Newcomb & Co., Auckland.

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S. AFRICA—

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J. F. Marshall, Johannesburg.
C. W. Champion, Bloemfontein.
A. F. Phillips & Co., Bulawayo.
Parker Wood & Co.,
Pietermaritzburg.

INDIA—

Oakes & Co., Ltd., Madras.
Treacher & Co., Bombay.

the estimated profits per bird gradually diminish as the season advances. Exact accounts were kept of all expenditure and receipts, and as all the chickens were sold by 1st November, it is possible to obtain very accurate information as to the returns. Briefly summarised, these were as follows:—

Hatching commenced on February 13th and ceased on June 11th; the first lot of birds was sold on May 28th, the last on November 1st. The total cost of eggs was £31 13s. 1d., in addition to which £4 19s. was expended on day-old chicks; the cost of oil for incubators and foster-mothers was £4 12s. 9d.; the cost of food was £142 4s. 3d., and £14 6s. 2d. was paid for occasional outside labour. Altogether, 2,192 chickens were sold; they were sold alive on the holding and collected by the purchasers, so that no deduction from the price has to be made for marketing or other expenses. The total sum realised was £301 5s. 3d. the average price obtained per chicken being thus 2s. 8³/₄d., ranging from 3s. in May and June to 2s. 6d. in September, October and November. The margin thus left to cover the labour of the small holder, rent, deterioration of equipment, risk, and interest on capital outlay was £103 10s., *plus* the value of the manure, which was regularly swept up from under the houses and around the feeding places. It must be remembered that this is the net result of not more than nine or ten months' work, and if it had been possible to commence hatching at the beginning of January, 3,000 chicks would have been reared, increasing the margin very considerably. The equipment and cost were as follows:—

	£	s.	d.
4 incubators at £6 5s. 0d.	25	0	0
14 brooders at £3 10s. 0d.	49	0	0
24 houses at £1 10s. 0d.	36	0	0
31 rolls 4-foot netting at 9s. 6d.	14	14	6
12 rolls 2-foot netting at 9s. 6d.	5	14	0
500 stakes at ½d.	1	0	10
Bamboo	1	0	0
Pegs	1	0	0
24 water pans at 7d.	0	14	0
24 grit pans at 7d.	0	14	0
24 feeding tins at 4d.	0	8	0
14 grit tins for brooders at 1s.	0	14	0
48 food tins at 2d.	0	8	0
12 food boxes at 1s.	0	12	0
2 barrows at 16s.	1	12	0
1 water barrow	1	10	0
6 tins for mixing food at 3s. 3d.	0	19	6
2 corn bins at 7s. 6d.	0	15	0
4 „ „ at 4s.	0	16	0
6 market baskets at 8s. 6d.	2	11	0
3 food baskets at 1s. 6d.	4	6	
60 food tins at 4½d.	1	2	6
1 weighing machine	1	10	0
1 „ „	1	0	0
Buckets, &c.	1	0	0
Kettles and sundries	0	6	0

£150 5 10

In addition it must be remembered that considerable expense is incurred in the first three or four months for eggs and food before there is any return from the sale of chickens, so that it would be necessary to have from £50 to £100 is ready money in addition to the £150.

It may be well to indicate that the success which has attended this trial up to the present appears to be due in very great measure to the systematic attention to detail which characterised all the operations, and especially in regard to the method of artificially rearing the chickens, to the selection, purchase, preparation and distribution of the food, to the periodic tests applied to discover the actual value of the ration in increasing live-weight, and to the watchfulness exercised in preventing the possibility of the introduction or spread of disease among the stock.

An intensive form of culture such as that described above involves experience, business capacity, extremely close attention to matters of detail, and constant personal supervision.—*Journal of the Board of Agriculture, December, 1912.*

Eggs all the Year Round.

Writing in the *Daily Express*, Mr. S. F. Edge has some interesting things to say regarding this important matter. In the course of his letter he draws attention to the fact that

“Every one who keeps fowls knows that almost any sort of fowls kept in almost any sort of way give eggs at certain periods of the year, when eggs are worth very little.

“When I went in for keeping fowls I pointed out to my people that it did not interest me to have plenty of eggs when the price of eggs was below what it cost to produce them. What I wanted from my fowls were eggs when eggs were dear.

“The result of striving for this I give you in a few figures. Where I keep my fowls in Sussex, the land is not of the best for fowls, as it is weald clay. The situation, facing south, is good, they have very ample room to run about, and large numbers are in a sense almost wild, but their egg-laying propensities are good, and, of course, on this point I am gradually weeding out those kinds of fowls which I find do not do well on my soil. This, of course, is done by proper records being kept of the egg-productive birds of the different kinds of fowls.

“Taking a fair average of twenty-five laying hens in May, June, and July, I find that for this period of three months, each hen averaged approximately fifty-four eggs.

“Taking three months ending this December and taking the same pro rata rate from now to the end of December—which, in fact, will really be rather better than in the past, as at present the fowls are beginning to lay better and better each week—I find the average is fifty-three eggs per bird for three months.

“It may be quite true that my records in the summer are not as good as they could be, but at least it does show that one can get a more even supply of eggs all the year round by taking a little trouble, and I have great hopes that eventually I shall have fowls which will lay their maximum number of eggs at the period when eggs are most expensive.”

Eggs from South Africa.

In the *Agricultural Journal of South Africa* it is stated that the Union Castle Steamship Company have agreed to carry trial shipments of eggs from South African ports to London at 25s. per ton, and poultry in cold chamber at 50s. per ton. Thus the cost from, say, Port Elizabeth to London, half over the globe, is less in the case of eggs than from Devonshire, say, 200 miles.

MRS. WILKINSON

CELEBRATED BREEDER AND EXHIBITOR OF

**BUFF, WHITE AND BLACK ORPINGTONS, BARRED,
— BUFF AND WHITE PLYMOUTH ROCKS. —**

HAS WON WITH ABOVE VARIETIES

111 SILVER CUPS

and thousands of First and Special Prizes
at all the leading shows, including several

CHAMPION TROPHIES AT CRYSTAL PALACE.

Birds she has exported have, no doubt, won more Championship Silver Cups all over the World than from any other breeder.

Can anyone else show such a record?

THIRTY SILVER CUPS

have been won at the leading Shows by purchasers of her stock and eggs, thus proving she sells, as well as retains, good reliable stock and eggs.

At Crystal Palace Show alone in 1907,
'8, '9, '10, '11,

ELEVEN SILVER CUPS

were won with birds bred from breeding pens and eggs sold, again proving quality of stock and eggs sold.

At the Grand International, Crystal Palace and Club Shows, Mrs. Wilkinson has won an average of 15 Silver Cups, Specials and First Prizes for the last six years.

At the last Crystal Palace Show, 1911,

Mrs. W. won Challenge Cup, seven Firsts, two Second and six Third Prizes, including First Prize for best breeding pen of Buff Orpingtons.

Mrs. Wilkinson was judging at Crystal Palace this year, hence not exhibiting.

Mrs. Wilkinson has won Challenge Cup five times for the best Buff Orpington Cockerel at the Buff Orpington Club Show; in fact, she has won 22 Buff Club Challenge Cups, which is surely a proof of her strain standing supreme.

Mrs. W. has also won Champion Challenge Trophy for best Plymouth Rock, three years in succession, at the Grand International Show.

Recent wins at the Dairy Show (1912)

include White Orpington Pullet, First (73 in class); also Challenge cup for the best White Orpington in the Show; also Societies' Silver Medal for the best Orpington Pullet, all varieties in the Show; Barred Rock Cockerel, First and two Specials; Buff Orpington Cockerel, Reserve; also in Limit Classes, First, Second, Third and Fourth Prizes.

At Haywards Heath Show,

won with White Orpington Pullet, First and Special for best White Orpington; also the Poultry Club Challenge Cup for the best Orpington, any variety in the Show; and with Plymouth Rocks, won two Second and Third Prizes.

At Manchester Show, Oct. 25th, 26th,
and 28th, won as follows:

With Buff Orpingtons, First and two Seconds; White Rocks, First and Gold Medal; White Orpingtons, Second, Third, and Fourth; Barred Plymouth Rocks, Second and Third.

Birds always on sale and Eggs in season.

Birds shipped to all parts of the world. Over 3,000 shipped last twelve months. All freight paid to nearest Port and shipped in the best Coops. Satisfaction guaranteed. A great speciality is made of properly matured breeding pens or trios, hence the wins of her customers noted above.

Three days' approval anywhere in the British Isles. Terms: Cash with order from unknown customers, which will be returned at once if birds not approved of.

Burrow House, Scotforth, Lancaster.

Telephone—13 GALGATE.

TABLE OF PRICES REALISED FOR HOME, COLONIAL, AND FOREIGN POULTRY, GAME, AND EGGS FOR THE FOUR WEEKS ENDING DECEMBER 14, 1912.

ENGLISH POULTRY—LONDON MARKETS.					FOREIGN POULTRY—LONDON MARKETS.				
DESCRIPTION.	1st Week.		2nd Week.		3rd Week.		4th Week.		COUNTRIES OF ORIGIN.
	Each.	Each.	Each.	Each.	Each.	Each.	Each.	Each.	
Surrey Chickens ..	3/0 to 3/9	3/0 to 3/9	3/0 to 3/9	3/3 to 3/9	3/3 to 3/9	3/3 to 3/9	3/3 to 4/0	3/3 to 4/0	Russia
Sussex	3/0 " 3/9	3/0 " 3/9	3/0 " 3/9	3/3 " 3/9	3/3 " 3/9	3/3 " 3/9	3/3 " 4/0	3/3 " 4/0	Belgium
Boston	2/3 " 3/0	2/3 " 3/0	2/3 " 3/0	2/3 " 3/3	2/3 " 3/3	2/3 " 3/3	2/3 " 3/6	2/3 " 3/6	France
Essex	2/3 " 3/3	2/3 " 3/3	2/3 " 3/3	2/6 " 3/6	2/6 " 3/6	2/6 " 3/6	2/6 " 3/6	2/6 " 3/6	United States of America ..
Capons	4/6 " 5/6	4/6 " 5/6	4/6 " 5/6	4/6 " 5/6	4/6 " 5/6	4/6 " 5/6	5/0 " 6/0	5/0 " 6/0	Austria
Irish Chickens	2/0 " 2/9	2/0 " 2/9	2/0 " 2/9	2/0 " 3/0	2/0 " 3/0	2/0 " 3/0	2/0 " 3/0	2/0 " 3/0	Canada
Live Hens	1/9 " 2/9	1/9 " 2/9	1/9 " 2/9	1/9 " 2/6	1/9 " 2/6	1/9 " 2/6	2/0 " 2/9	2/0 " 2/9	Australia
Ducks	3/3 " 3/9	3/3 " 3/9	3/3 " 3/9	3/3 " 3/9	3/3 " 3/9	3/3 " 3/9	3/3 " 5/0	3/3 " 5/0	
Goslings	6 1/2 " 7	6 1/2 " 7	6 1/2 " 7	7 " 7 1/2	7 " 7 1/2	7 " 7 1/2	7 1/2 " 8	7 1/2 " 8	
Turkeys, Cocks "	8 " 11 1/2	8 " 11 1/2	8 " 11 1/2	9 " 11 1/2	9 " 11 1/2	9 " 11 1/2	9 " 1/0	9 " 1/0	
" Hens "	8 " 10	8 " 10	8 " 10	9 " 10	9 " 10	9 " 10	9 " 11	9 " 11	
ENGLISH GAME—LONDON MARKETS.					FOREIGN GAME.				
DESCRIPTION.	1st Week.		2nd Week.		3rd Week.		4th Week.		COUNTRIES OF ORIGIN.
	Each.	Each.	Each.	Each.	Each.	Each.	Each.	Each.	
Grouse (Brace)	1/9 " 2/3	1/9 " 2/3	2/3 " 2/6	2/3 " 2/6	2/3 " 2/6	2/3 " 2/6	2/0 " 2/3	2/0 " 2/3	Capercailzie
Partridges	2/3 " 2/6	2/3 " 2/6	2/3 " 2/6	2/3 " 2/6	2/3 " 2/6	2/3 " 2/6	2/3 " 2/9	2/3 " 2/9	Black Game
Pheasants	1/9 " 2/3	1/9 " 2/3	2/0 " 2/3	2/0 " 2/3	2/0 " 2/3	2/0 " 2/3	2/0 " 2/6	2/0 " 2/6	Ptarmigan
Black Game	2/0 " 2/3	2/0 " 2/3	2/0 " 2/3	2/0 " 2/3	2/0 " 2/3	2/0 " 2/3	2/0 " 2/3	2/0 " 2/3	Partridges
Hares	2/6 " 3/0	2/6 " 3/0	2/6 " 3/0	2/6 " 3/3	2/6 " 3/3	2/6 " 3/3	3/0 " 3/6	3/0 " 3/6	Quail
Rabbits, Tame	1/3 " 2/0	1/3 " 2/0	1/3 " 2/0	1/3 " 2/3	1/3 " 2/3	1/3 " 2/3	1/3 " 2/0	1/3 " 2/0	Bordeaux Pigeons
" Wild	8 " 11	8 " 11	8 " 11	8 " 11	8 " 11	8 " 11	9 " 11	9 " 11	Hares
Pigeons, Tame	— " —	— " —	— " —	— " —	— " —	— " —	— " —	— " —	Rabbits
" Wild	— " —	— " —	— " —	— " —	— " —	— " —	— " —	— " —	Snipe
Wild Duck	1/9 " 2/0	1/9 " 2/3	1/6 " 2/3	1/6 " 2/3	1/6 " 2/3	1/6 " 2/3	1/9 " 2/3	1/9 " 2/3	
Woodcock	2/0 " 3/0	2/0 " 3/0	2/0 " 3/0	2/0 " 3/0	2/0 " 3/0	2/0 " 3/0	2/0 " 3/0	2/0 " 3/0	
Snipe	9 " 1/6	9 " 1/6	9 " 1/6	9 " 1/6	9 " 1/6	9 " 1/6	9 " 1/6	9 " 1/6	
Plover	9 " 1/0	9 " 1/0	9 " 1/0	10 " 1/0	10 " 1/0	10 " 1/0	10 " 1/0	10 " 1/0	
ENGLISH EGGS (Guaranteed New-Laid).					FOREIGN EGGS.				
MARKETS.	1st Week.		2nd Week.		3rd Week.		4th Week.		COUNTRIES OF ORIGIN.
	Per 120.	Per 120.	Per 120.	Per 120.	Per 120.	Per 120.	Per 120.	Per 120.	
LONDON	16/- to 18/-	16/- to 18/-	16/- to 18/-	17/- to 18/-	17/- to 18/-	17/- to 18/-	17/- to 18/-	17/- to 18/-	Russia
Provinces	Eggs per dozen.	Eggs per dozen.	Eggs per dozen.	Eggs per dozen.	Eggs per dozen.	Eggs per dozen.	Eggs per dozen.	Eggs per dozen.	Denmark
CARLISLE	2/0	2/0	2/0	2/3	2/3	2/3	2/0	2/0	Germany
BRISTOL	2/0 1/2	2/0	2/0	1/7	1/7	1/7	2/0	1/7	Netherlands
ENGLISH EGGS (Guaranteed New-Laid).					FOREIGN EGGS.				
MARKETS.	1st Week.		2nd Week.		3rd Week.		4th Week.		COUNTRIES OF ORIGIN.
	Per 120.	Per 120.	Per 120.	Per 120.	Per 120.	Per 120.	Per 120.	Per 120.	
LONDON	16/- to 18/-	16/- to 18/-	16/- to 18/-	17/- to 18/-	17/- to 18/-	17/- to 18/-	17/- to 18/-	17/- to 18/-	Russia
Provinces	Eggs per dozen.	Eggs per dozen.	Eggs per dozen.	Eggs per dozen.	Eggs per dozen.	Eggs per dozen.	Eggs per dozen.	Eggs per dozen.	Denmark
CARLISLE	2/0	2/0	2/0	2/3	2/3	2/3	2/0	2/0	Germany
BRISTOL	2/0 1/2	2/0	2/0	1/7	1/7	1/7	2/0	1/7	Netherlands

IMPORTS OF POULTRY AND GAME.

MONTH ENDING NOV. 30TH, 1912.

COUNTRIES OF ORIGIN.	DECLARED VALUES.	
	Poultry.	Game.
Russia	£10,562	£30
France	£7,671	£24
Austria-Hungary	£3702	—
United States of America	—	£5,781
Other Countries	£8,859	—
Totals	£30,794	£5,835

IMPORTS OF EGGS.

MONTH ENDING NOV. 30, 1912

COUNTRIES OF ORIGIN.	DECLARED VALUES.	
	Quantities in Gt. Hund.	Declared Values.
Russia	1,052,940	£486,670
Denmark	317,372	£202,102
Germany	53,887	£23,224
Netherlands	36,316	£15,644
France	28,765	£15,883
Italy	35,676	£20,379
Aust.-Hungary	33,760	£15,142
Other countries	142,120	£60,638
Totals	1,700,826	£842,682

—S. G. HANSON'S— Standard White Leghorns.

*BRED TO LAY.
Noted for Constitution-
al Vigour, Stamina,
Size of Eggs, and
Prolificacy.*

Breeding Hens, two years old, mated to Cockerels. PULLETS NOT USED AS BREEDERS.

*All Stock
and Eggs
sold, only
from the
Farm.*

Breeders of the flock of 402 pullets which laid in

January	7616
February	7310
March	8606

WORLD'S RECORD 23,532

Eggs for Hatching from March to May 5/- per dozen; 35/- per hundred; £15 per 1,000; Cockerels 10/6 and 21/- each.

THE OLD DOWN, BASINGSTOKE.

PRACTICAL PAGES FOR POULTRY KEEPERS.

BY

C. E. J. WALKEY,

*Committee of Utility Poultry Club;
Provisional Committee National
Poultry Institute;
Instructor in Poultry Keeping
Somerset County Council.*

Price 1/- net.

or 1/1 post free.

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LONDON, E.C.**

Table Points and Turkeys that come early to Maturity a Special Feature.

Unrelated Birds for Mating, Showing, or Table, always on Sale.

GAGE HARPER, Mason's Bridge Farm, Raydon, Ipswich, ENGLAND.

(Telegrams and Station: Hadleigh, Suffolk)

Exporter and the Largest Breeder of High-class, Prize-bred Mammoth Bronze Turkeys.

35 years' practical experience, during which time Prizes, Cups, and Medals have been taken at all the leading live and dead Shows in England.

PRICE LIST AND TESTIMONIALS ON APPLICATION.

Over 200 Turkey Hens kept for Stock annually on Mason's Bridge Farm

Day Old Turkey Chicks and Eggs in Season

England's Famous Stud. WHITE ORPINGTONS.

Has won more honours at the Dairy, Palace, and Club Shows, 1908-1911, than any other stud, and more 1sts and Specials in open classes at these events in 1911 than all other studs together; also leading honours America and South Africa, and leading prices for sales.

Has A World-Wide Export Trade. Breeding Stock and Winners supplied to breeders all over the world. Show Birds a Speciality.

Has a Short Leg and deep, low, wide, massive body and neat head the judge of to-day demands, together with great purity of Whiteness.

Utility Birds from £0 7 6; Utility Breeding Pens from £3 10 0; Exhibition Birds from £1 1 0; Exhibition Breeding Pens from £5 5 0

Prolific Layers and splendid table qualities. A profit-earning bird with a splendid demand at the best prices.

MISS CAREY, Toynton, Spilsby.

Buff and White Orpingtons and Faverolles bred.

Pupils received.

QUALITY HILL POULTRY YARDS,

WHERE

BENNETT'S FAMOUS S.C. RHODE ISLAND REDS

AND

BARRED PLYMOUTH ROCKS

ARE RAISED

F. A. Bennett, S.C. Rhode Island Reds.

Wm. Z. Bennett, Barred Plymouth Rocks.

Consolidated December 1, 1908.

Write for Prices and Record of Stock.

YARDS NEAR VAN WINKLE LAKE, CANTON, ILL., U.S.A.

When answering advertisements please mention the "Illustrated Poultry Record." It will help you and it will help us.

CORRESPONDENCE.

The Plymouth Rock.

To the Editor of the Illustrated Poultry Record.

Dear Sir,

I was very interested in your Christmas number, and especially so in regard to what you had to say about Plymouth Rocks under the heading of "Fanciers and Fancy Matters," so much so that I am going to bother you with a few lines in reply to one or two statements which I think are somewhat misleading.

I, of course, do not know the name of the gentleman who wrote this particular article, but I am certain that he does not know very much about what is going on in the Rock circle, especially Barred and Buff or he would not make the statements he does.

During these last nine months I have had occasion to tour the best part of the British Isles, visiting a great number of shows, and in consequence think I am in a position to speak as to the popularity of the Plymouth Rock, especially the Barred variety. This variety, in my opinion, has not been going down hill of late, as your correspondent would have us believe; rather has it been going steadily uphill the whole time, and is going to continue to do this for some years to come. I think I am right in saying there has been more interest taken in Barred Rocks this last season than ever, and with a club of its own to push and forward its interests, this most fascinating variety is going a very long way.

I am more than pleased to find myself in agreement with you on the single mating system. Single mating is the salvation of any breed, and many Barred Rock breeders have already recognised this and are working on this line, which is undoubtedly the only one in the true interest of the breed.

The Whites have a club of their own, as have Buffs, about which I shall say a few words in another letter. Blacks are certainly not making many new friends or much improvement. The Blue Rock introduced at the Palace this year is a handsome variety and one destined to become very popular in course of time.

I shall be pleased to give any information in regard to joining the club on receiving due application.

Yours truly, ALFRED A. FLEMING,

Hon. Sec. & Treas., Barred Plymouth Rock Club.

To the Editor of the Illustrated Poultry Record.

Dear Sir,

In the article "The Plymouth Rock," which appeared in your grand Christmas number under the heading of "Fanciers and Fancy Matters," there is a statement to which I must take exception, viz.: "There is, undoubtedly, a White Plymouth Rock Club, as well as one solely to look after the interest of the Buffs, but like so many of these single variety clubs they only 'bob up serenely' when the big shows are on. It is always a pity when a club is allowed to lie dormant in what may be termed the 'off' season" etc.

The White Club can doubtless answer for itself, and I try very briefly to defend the interests of the Buff Club.

For the last nine years, during which I have had the honour of acting as hon. secretary and treasurer to the Buff Club, I have endeavoured to keep the club as much as possible in front of the public, and have done my best to further the interests of the Buff Rock in every way; whether I have succeeded or not I leave Buff breeders to judge.

I can assure your correspondent that the club does not lie dormant in the 'off' season, and does not, moreover, 'bob up serenely' when the big shows are on—rather the reverse.

The club is doing a great deal for Buffs in fancy circles in various ways, which I need not detail, and has also for the past two years offered special money prizes in the utility laying competitions. This coming season will see

Buff more widely kept than ever, their great record in the laying competitions having given them a big advertisement. They are, without doubt, one of, if not the most useful combination fowl, that is exhibition and utility, we have at the present day.

In conclusion, I shall be pleased to forward particulars of this grand breed and the club to any interested. Needless to say I shall be only too glad to receive any suggestions the writer of your article cares to give me in regard to making the club more progressive even than it is at present.

Yours truly, ALFRED A. FLEMING,

Hon. Sec. & Treas., Buff Plymouth Rock Club.

To the Editor of the Illustrated Poultry Record.

Dear Sir,

I was very interested in reading your article on Plymouth Rocks in your December issue, and was surprised in reading some of your remarks, especially your opinion that the Barred has been going somewhat downhill of late. I may say that I have been a breeder of this variety for over fifteen years and my experience of the last few years has been that a considerable number of new fanciers have taken up this variety, and to-day it is far more popular than it was ten years ago, and it will still be further popular. In my opinion it will be the leading breed of the future when the public get the silly idea out of their heads that you require double mating, which is absolutely ridiculous, as all through since my commencement I have never double mated. I have bred both exhibition cockerels and pullets from the same pens, and I am a great advocate of single mating. During the last twelve months I have won more prizes with Barred Plymouth Rocks than any other breeder in the British Isles, and not one of my birds have been bred from double mating. The man that wishes to get to the top in breeding Barred Plymouth Rocks can only do so by first stocking from a reliable breeder and then keeping his stock absolutely line bred. This is how I have obtained my success in the breed. There is no doubt but what will help this fine old breed, which is, without doubt, one of, if not the finest, winter laying and utility bird to-day, is the club which used to be the "Plymouth Rock Club," but which, at their recent meeting in Manchester was formed into the "Barred Plymouth Rock Club." They are going to offer specials both in Scotland and Wales, as well as England, at the shows for this variety.

Now, may I just say a few words with regard to the self-coloured variety of the Rock, which not only in my opinion, but several of the Rock authorities in this country, will be before very long not only the fashionable variety, but the leading utility and exhibition self-coloured Rock, and that is the Blue Rock, as without doubt it is the finest blue fowl yet introduced in this country. For one, I am taking up the breed strongly, and shall do all in my power to make this variety the most popular, and it would not in the least surprise me, to see it surpass the Rhode Island Red in popularity, both as a utility and exhibition bird, as they breed far truer to colour, shape and size, with better yellow legs than any of the other self-coloured varieties of the Rock fancier.

I shall be very pleased indeed if you will publish this letter in your next issue should you think that my few remarks will interest your readers, as I am only too pleased to try and give the Rock breed a few words of praise which they deserve far more than the majority of the new breeds introduced in recent years. I can only say that if the beginner or anyone requiring a breed which is easy to rear, a first-class exhibition bird, and an excellent utility bird, and one where there is more interest to the breeder than any other, I can sincerely recommend to him either the Barred or the Blue Plymouth Rock.—Yours etc.,

December 18th, 1912.

J. MARSDEN CHANDLER.

A Poultry Plant that dosen't pay is a hobby.

A Poultry Plant that does pay is a business.

SINGLE COMB WHITE LEGHORNS

FROM THE

MODERN BUSINESS POULTRY PLANT

MEAN

PROFIT TO THE BUYER.

*Just Common Sense and our S. C. White Leghorns
The Greatest Combination for profit ever Known.*

Write for full particulars to—

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WHITE LEGHORN POULTRY FARM, WATERVILLE, N.J., U.S.A.

Yorkshire Council for Agricultural Education,
MANOR FARM, GARFORTH.

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FOR SALE.**

WHITE LEGHORNS
(Danish imported).
SILVER-LACED WYANDOTTES.
BUFF ORPINGTONS

Single-Combed RHODE ISLAND
REDS (Imported from America).
FAVEROLLES.
SCOTCH GREYS.

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Five years Dairy Show Champion ; Nine years Palace Champion. The best of its kind produced. A truly marvellous and thoroughly consistent hatcher.



DRAWER TYPE.

30-Egg size..	2	14	0
60-,,	3	7	6
100-,,	4	0	0
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PANEL TYPE.

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100-,,	4	5	0
200-,,	7	5	0

PHIPPS' "PREMIER" HOT AIR INCUBATOR.

The winner of Silver Medal Highest Award in its class, Crystal Palace, 1912, and the machine for all Hot Air Incubator for 1913. The "Premier" Incubator with its special moisture device "solves the problem."

	£	s.	d.
70-Egg size ...	3	0	0
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250-,,	6	0	0
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The most marvellous machine in the whole world of poultry for successfully rearing chicks. The birds are positively forced to thrive. This famous machine is the Palace Champion and is THE Foster Mother for 1913.

	£	s.	d.
60-Chick size ..	2	13	0
100-,,	3	3	0
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MIDLAND WORKS,
No. 12 HARBORNE, BIRMINGHAM.

Telegraphic Address—"INCUBATOR, HARBORNE."

To the Editor of the Illustrated Poultry Record.

Dear Sir.—I was interested in your article on Plymouth Rocks in *The Illustrated Poultry Record* for December, and agree with your correspondent *re* the utility quality of Rocks. I am writing particularly on Buffs, which I have kept quite a number of years as a utility and exhibition fowl. They are exceptionally good layers both in winter and summer, and one is at a loss to know why this charming and most useful variety is not even more largely taken up.

As a member of the Buff and the Barred Plymouth Rock Club, I know our energetic Hon. Sec., Mr. Fleming, is in a much better position to reply to the portion of the article as to whether the Plymouth Rock is "going down hill."

As far as Buffs are concerned, personally I am sure that they are gaining ground and getting in more fanciers' hands. The new and charming variety, "Blue," I understand, are most excellent layers, but my experience with them is very limited, having only just been fortunate enough to procure a good breeding pen, but with their solid blue plumage and bright orange legs combined with good utility qualities, I have no hesitation in predicting a good demand for this variety.—Yours etc.,

December 10th, 1912.

HARRY HALL.

The Petition to Parliament.

SIR,

Some poultry keepers have expressed disappointment at the reception given to our petition regarding the confinement of foxes. The impression of a member of the House of Commons is that it was an unusual and immense success. As he pointed out hundreds of petitions are presented. And the vast majority are never mentioned by the press or heard of by the public, yet the poultry keepers' petition was in almost every paper.

If poultry keepers would bear in mind that on some subjects petitions go up to Parliament repeatedly for thirty or forty years before notice is taken, and that we are fighting one of the oldest, most powerful, and certainly the wealthiest of institutions in the country, they would not be so easily discouraged. Until recently, moreover, the hunts have had the backing of the entire press of the country. Only three years ago scarcely a daily could be induced to print any letter from us; to-day there are but two important newspapers in the kingdom which refuse to put our side of the question before their readers, or rather they ignore it altogether.

Two months ago one of the most powerful and widely read London dailies still remained obdurate; since the petition was set on foot its columns have opened to us, and the articles inspired by the hunts have given place to a long leader warning hunting men that they must completely change their ways and that quickly. Newspaper editors have not been misled by the attitude of the House, they have seen the matter in its true light. Hunting men have made many blunders, but never have they served our cause so thoroughly as by their laughter in parliament. It has brought the matter before every newspaper reader in the land. It is not too much to say that we have now got the press and public opinion round to a fairer consideration of our claims.

That three hundred poultry keepers should be found who would dare to sign such a petition has so startled some hunting men that they have tried to spread a report through the House of Commons that it could not be a genuine one.

Meantime further education of the public is necessary, and I believe that nothing would bring the truth home more effectually than a cinematograph display co-incident with the big shows next season. I shall be glad if poultry keepers will assist with good, clear photographs of any fox raids which they possess.—Yours etc.,

Ockham,

Woking.

A. S. GALBRAITH, Hon. Sec.,
Poultry-Keepers Protection Society.

REVIEWS, Etc.

Live Stock Journal Almanac, 1913.

For many years the Live Stock Journal Almanac has carried to all parts of the world the annual record of the pure-bred stock of this country, and has done much to extend the reputation of our British breeds, whose excellence is now so universally acknowledged. The issue of this noted publication for 1913, which, as usual made its appearance on the opening day of the Smithfield Club Show, contains all those features by which it has always been characterised. It is the largest of the agricultural annuals, extending altogether to 350 pages, while there are numerous illustrations.

Vinton's Agricultural Almanac and Diary, 1913.

Farmers and landowners will find "Vinton's Agricultural Almanac and Diary, 1913," the right volume with which to begin the new year. It is compiled specially for their use, and is packed from cover to cover with all kinds of information which cannot be carried conveniently in the memory, but which is here available in a convenient form when required.

Walker's Loose-Leaf Diaries.

We have pleasure in again calling attention to the loose-leaf type of book manufactured by the firm of John Walker and Co., Warwick Lane, E.C. The diaries are made in all sizes and bound in a variety of leather covers, and for the many advantages this type of book possesses it is the best on the market. The simplicity of construction prevents them getting out of order, the rings being solid and rigid. The series of expert manuscript books produced by the same firm also possess distinct advantages. The leaves can be torn out and inserted in separate transfer cases for various subjects. Whatever kind or type of diary, pocket, or note book is required, the same can be supplied by Messrs. Walker and Co. They contain no superfluous matter, and are easily the best of their kind.

Some Attractive Diaries.

Messrs. Charles Letts and Co. has favoured us with a selection of their diaries for 1913. Several new editions have been added, for the great success of what may be called specialised diaries last season, such as the Gardener's—School Boy's, etc., has induced Messrs. Charles Letts and Co. to issue others, and we now have the Poultry Keeper's Diary—the Girl Guides Diary and Christmas Card Diaries, etc.

As usual, the diaries are distinguished by the Self Opening tablet and the Insurance Coupon for £1,000. In connection with the latter, nearly £20,000 has been paid in claims, and it is a significant fact that the last two railway accidents, those at Ditton Junction and Preston Station have resulted in two claims from each accident.

THE MORLAND DOUBLE BROODER.

Two brooders at cost of one.

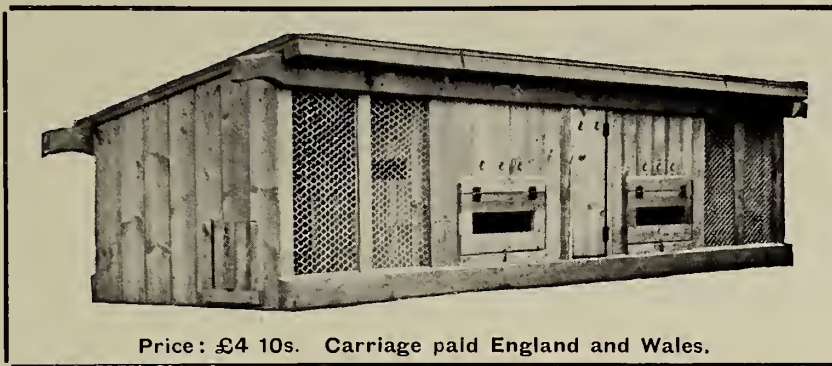
Oil consumption no greater than in old-fashioned single chamber type.

Labour bill halved.

Absolutely storm-proof.

STRONG BIRDS SEPARATED FROM WEAK

PATENT No. 28219-1910.



Price: £4 10s. Carriage paid England and Wales.

Lamp fumes amongst chicks impossible.

Thorough study made of ventilation.

Copper tank throughout, which can be removed bodily in a few seconds.

Day old chicks and month old
IN SAME MACHINE.

**The most practical and reliable rearer on the market combining utility with economy.
The very best material and workmanship.**

A few opinions

- from Mr. C. Sandell, Jolesfield, Partridge Green. The Brooder you supplied me with has worked very well. I have not had the least trouble with it in any way.
- from Mr. C. T. Edwardes, Riverside, Needham Market. Would you please send to arrive by Thursday, 22nd inst., one Morland Double Brooder. The last one I had from you was most satisfactory.
- from Mr. S. C. Sharpe, Hon. Sec. Sussex Poultry Club, Ringmer, Lewes. Pleased to say Brooder is very satisfactory.
- from Mr. R. Tellam Hocking, Tregawne, Withiel. We received the Foster-Mother which I like very much.
- from Mr. F. H. Wheeler, Bridge House, Marden. I am very pleased to inform you that so far I have had excellent results from your Brooders, can you send me one at once for delivery by Thursday next.

Manufacturers also of all Poultry Appliances.

Catalogue post free by return.

THE MORLAND APPLIANCE Coy., CRAWLEY, SUSSEX.

PIGEONS! PIGEONS!

Stubbins' Breeds were good winners at the Birmingham Show, 1912, and have many other successes to their credit!

PEDIGREE BIRDS FOR SALE.

Full particulars on application to

E. H. STUBBINS,

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Alfred E. Stokes

63, Gough Road,
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B'ham.

BREEDER OF EXHIBITION PIGEONS

invites applications
from Buyers in all
parts of the World.

**PRIZE WINNERS AT
BIRMINGHAM SHOW, 1912**

*Full particulars as to
Breed, Quality, and
Price on Application.*

Steamships Postcards.

A set of well produced postcards in colours has been issued by the Great Central Railway illustrating their Fleet of well-equipped steamers, which maintain the services between Grimsby and Hamburg, Rotterdam and Antwerp. The colouring of the various cards had been so artistically treated as to make the set the finest we have seen for some time. The packet of six cards is sold for the nominal sum of 2d., and can be obtained at Great Central Station Bookstalls, G.C.R. Town Offices, or will be sent post free for 3d. from Publicity Dept., Great Central Railway, 216, Marylebone road, London, N.W.

BLUE ORPINGTONS.

BY WILLIAM COOK AND SONS.

THERE are pessimists in the poultry fancy who advance the theory that there will never be more than three varieties of any breed which will become really popular, and although others may be introduced and boomed, they will drop out. Judging from the numbers of several of the popular varieties of Wyandottes exhibited at the recent Palace and Dairy Shows this does not hold good with this breed, and it certainly does not with the Orpingtons, amongst which we find that not only are the Whites, Buffs, and Blacks selling better than ever before, but the Blues are making such headway that they will undoubtedly be as popular as the Buffs within two years from now. Their success has been little short of phenomenal, for not only have they made higher prices than any other variety of the profitable Orpington and within three years of their introduction, too—but well-known breeders who have devoted many years to the production of high-class birds in other breeds, and who have hitherto not kept any variety of the Orpington, have taken them up this season, realising that unless they did so they would lose a really profitable investment. The reason for the demand is not far to seek, as the birds are the most attractive in colouring of all breeds, and many as have been the disappointments for the breeders of Blue varieties in the past, owing to their birds not coming true to type and colour, the results from this latest Blue fowl are entirely encouraging, because they breed very true to colour, which is undoubtedly due to their being of a richer shade of blue than the other varieties of blue fowls, which had they been properly named would have been termed "slate" instead of blue. The lack of progress made by the Blue Andalusian was due to the fowls being bred too light in colour, resulting in the production of nearly as many white birds as blues, while the Blue Langshan was doomed from the time the extreme length of shank was voted for, because this meant that it was almost an impossibility to raise a satisfactory percentage of chickens. More recently the Blue Leghorns and

Blue Wyandottes have had a good call, but owing to the mistaken policy of their devotees in ruling for an unlaced bird of a washed-out blue tint, they have lost ground, and in doing so have made a great opening for the Blue Orpington, which is not only a true Orpington in type, but possesses the most fascinating plumage, as the ground colour of the birds is a rich blue, which, in the hens and pullets is laced with a darker shade, and the breast of the male bird matches this, while his hackles, saddle, and tail are a rich dark shade of blue, while the birds of both sexes have a mass of the most beautiful soft feather of the same shade as their ground colour on their thighs. They have dark eyes and dark blue legs, and we have never yet met anyone who did not express admiration when first seeing a pen of these birds. Their type is quite remarkable, and while they are of true Orpington shape, and of a colour which appeals to everyone, their qualities are such that on their utilitarian value alone, they will be one of our most popular varieties in a short time. They are the best of layers, and their development in seven months from the shell onwards is nothing short of remarkable, as at this age the cockerels are large and vigorous, and the pullets are in full lay. We have kept a careful record of the laying results of our birds of this variety during the past year, and have found they equal the best strain we have of White Orpingtons for egg-production, so that apart from their value as the finest selling breed of this season, they have come to stay because they possess the necessary utilitarian qualities to appeal to those who must make their fowls pay for all the food they consume, and a good profit on the initial outlay. As table birds they have very tender juicy flesh of exquisite flavour, and they have as much breast meat as a Game Dorking, so their qualities will secure for them the lasting demand which all useful breeds obtain. It is, however, as the most beautiful variety of fowls which they certainly are, that their popularity has become assured for the present, and during the International Show, held at the Crystal Palace, from November 12th to 14th last, the pens occupied by the wonderful display of these birds were the centre of interest from morning till closing time. We have no hesitation in saying that the Blues will be the most popular of any within a short time, and that those who want to make money of their birds would do well to purchase eggs early this season, because they will be able to sell the stock raised at a better profit than is possible with any other breed, while those who indulge themselves by keeping a pen will have a constant pleasure in their fowls. They breed very true for a new variety, and come of excellent type. The most profitable way to obtain them is to start with eggs, because the value of the birds is at present very high, and it is to share in the prosperous demand for birds which everyone who is farseeing, realises will continue, that so many people will be setting eggs from the right class of bird, during the present season.

Unrivalled for
Winter Egg Production.
 Improving the quality and WHITENESS of the
Flesh of Table Poultry
 (and **TURKEYS**).

In tins, post free, 1/-, 2/6, 4/6.
 Larger quantities much cheaper.

Apply **A. HARTLEY**,
 The "PHOSTO" Co., Emsworth, Hants.

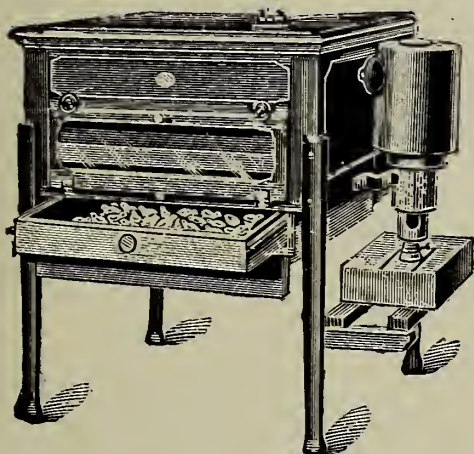
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10,000 EGGS TURNED IN LESS THAN 5 MINUTES

IN A

GLOUCESTER INCUBATOR

by means of our New Patent Self-turning Egg-tray.



The illustration depicts OUR PATENT LAMP, which holds sufficient oil for the whole hatch, and is a vast improvement on the self-fillers hitherto sold with incubators. It is permanently fixed in position, and the burner is attended to by withdrawing a slide to which it is fitted, to a convenient position in front of the incubator. Being made to contain a large body of oil, it is free from all risk of fire as it is always cool, and as no vapour can be given off, there is no smell and no loss by evaporation, as is the case with small reservoirs which soon get heated. This lamp is supplied with any Gloucester Incubator without extra charge.

PRICES OF INCUBATORS.

40 egg size ..	£2 10 0	150 egg size..	£4 5 0
66 " "	3 0 0	240 " "	6 0 0
100 " "	3 15 0	390 " "	7 5 0

Prompt despatch Guaranteed. Carriage Paid.

Our PATENT SELF-TURNING EGG TRAY turns all the eggs in a second by one movement of the hand without the slightest jar or vibration. The eggs can be turned without opening the door, so that the temperature can be kept absolutely constant. It is an enormous time and labour saver. Thousands flocked to see it at the Dairy, Manchester, and Crystal Palace Shows, and it was the unanimous opinion that it was the best invention ever brought out for the improvement of incubators.

Our PATENT REFLECTOR will enable the Thermometer to be read with the greatest ease.

Our PATENT AUTOMATIC DOOR CLOSING APPARATUS automatically closes the door, after cooling, at any specified time in your absence without any attention on the part of the operator. These improvements make the "Gloucester" an absolutely automatic Incubator, and places it a long way ahead of all others.

Catalogue, with particulars, post free on application.

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TRADE ITEMS.

Transport of Poultry.

The poultry and pigeon show held at the Hague in December has called the attention of many British breeders to the chances of business with Holland. Excellent arrangements were made by the Great Eastern Railway Co., for the transport of birds to this show. The Company announces that there is a daily service of boats from Harwich to the Hook of Holland. When sending consignments, a consignment note must be filled in and signed by the consignee for all consignments. This should be posted to Mr. E. Smith, of the parcels office at Liverpool Street station, or to the manager of the local parcels office, with instructions how to forward, and giving information as to how soon the consignment will be received. For consignments from Holland to this country, information should be sent to the Great Eastern Railway Co.'s agents at the Hook of Holland, Messrs. Hudig and Pieters, with instructions for the re-forwarding to destination.

America sends Poultry.

The s.s. "Chicago" brought from America on a recent trip, a large consignment of White Leghorns. These birds have been selected from several of the largest farms in the States by Mr. Percy A. Cook, and are all brought from stock with a trap-nested record of over 200 eggs per bird. The destination of the birds is the Molassine Model Poultry Farm, Twyford, Berks, (owned by the Proprietors of the Molassine Poultry and Chicken Foods). During the coming season a limited number of eggs for sitting, produced by these birds, will be on sale.

We are informed that the Proprietors of the Molassine Poultry and Chicken Foods have recently been granted the Royal Warrant of Appointment to H.M. King George V.

Mr. Tamlin's Exports.

The following is a list of Mr. Tamlin's exports for November, 1912: twenty 30 egg incubators, sixty 60 egg incubators, eighty 100 egg incubators; forty 200 egg incubators, ten 30 ostrich incubators, fifty brooders, to Fletcher Bradly, sole agent for Canada; six 100 incubators two 30 ostrich incubators, to Fernand Colman, sole agent for Belgium; ten 60 incubators, to Ed. Baron, sole agent for Switzerland; six 100 incubators, to H. E. Marcareuhas sole agent for Portugal; three 100 incubators, six 100 incubators, three 100 foster mothers, three 60 foster mothers, to C. W. Champion, sole agent for the Orange Free State; one 100 incubator, one 100 nonpareil foster mother, one 100 sunbeam, to the Monastery, Natal, S. Africa; one 30 incubator, to Jamaica, order of Army and Navy stores; one 60 incubator, one 100 incubator, to Societe Anonyme Verreries du Nord, Belgium. We would draw attention to the fact that there was an exceptionally large shipment to Canada, which we understand is the largest shipment of poultry rearing appliances ever sent out from England in one consignment. This consignment was sent away from here in 20 trucks, which made up a special train direct from Twickenham to the Millwall Docks, and were shipped by the S.S. "Montfort."

William Cook & Sons' Exports.

William Cook & Sons—Originators of all the Orpingtons—have shipped the following birds during the past few weeks:—

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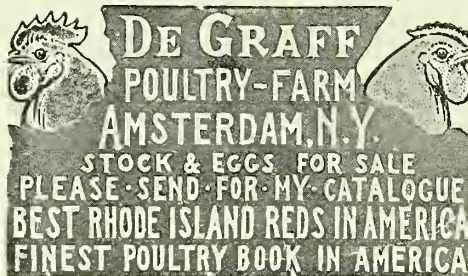
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